IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF OKLAHOMA

(1) JAMES D. BUCHANAN, Plaintiff, vs. (1) TURN KEY HEALTH CLINICS, LLC, (2) ROB FRAZIER, in his official capacity as Muskogee County Sheriff, (3) BOARD OF COUNTY COMMISSIONERS OF MUSKOGEE COUNTY, (4) DR. COOPER, and (5) KATIE MCCULLAR, LPN, Defendants.	)	Case No.: 18-CV-171-RAW

EXHIBITS IN SUPPORT OF DEFENDANT, TURN KEY HEALTH CLINICS, LLC MOTION FOR SUMMARY JUDGMENT ON ALL CLAIMS AND BRIEF IN SUPPORT

Exhibit 10 L'Heureux Report

IN THE UNITED STATES DICTRICT COURT FOR THE EASTERN DISTRICT OF OKLAHOMA

Expert Medical Report in the Case of James D. Buchanan, Plaintiff, vs. (1) TURN KEY HEALTH CLINICS, LLC, (2) ROB FRAZIER, in his official capacity as Muskogee County Sheriff, (3) BOARD OF COUNTY COMMISSIONERS OF MUSKOGEE COUNTY, (4) DR. COOPER, and (5) KATIEMCCULLAR, LPN, Defendants.
Case No.: CIV-18-171-RAW

QUALIFICATIONS:

I am a board-certified Orthopedic Surgeon with fellowship specialty training in Spine Surgery. I received my undergraduate degree from Texas Christian University followed by the completion of my Doctor of Medicine degree from The University of Texas Medical Branch at Galveston, graduating in 1991. I then completed an Orthopedic Surgery residency training program in New York City at New York Medical College beginning on July 1, 1991 and completing residency on June 30, 1996. I was accepted into the prestigious Twin Cities Spine Center in Minneapolis, Minnesota for sub-specialty fellowship training in spine surgery. I completed my fellowship training at Twin Cities Spine Center on July 31, 1997. I saw my first patient in the Oklahoma City area on August 8, 1997 and I have been in continuous Orthopedic Surgery Practice with an emphasis on Orthopedic Surgery of the Spine, for over 21 years.

I completed the two day, written board examination administered by The American Board of Orthopedic Surgery in August 1996 and passed the examination on my first attempt. The written board examination was followed, three years after completion of my fellowship, with the Oral Board Examination administered by The American Board of Orthopedic Surgery in Chicago, Illinois on July 13, 2000. I passed the oral examination on my first attempt. I was awarded the distinction of being Board-Certified by The American Board of Orthopedic Surgery beginning in 2000. Due to a change in the board certification rules, I am required to undergo recertification every 10 years. I successfully completed recertification and received my second certificate acknowledging Board Certification on January 1, 2011. I am scheduled to undergo board recertification again in 2020.

I currently have an unrestricted license to practice medicine in both the State of Oklahoma and the State of Texas. I am an active Fellow in the American Academy of Orthopedic Surgeons, an active Fellow in the Scoliosis Research Society and an active Fellow in the American College of Surgeons (FACS).

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A copy of my current curriculum vitae is attached to provide further information regarding the scope of my qualifications.

Prior Testimony:

I have provided deposition testimony in 19 separate cases over the last 10 years. They include:

1. Phillip Curtis Kirk vs. BNSF Railway Co., Case Number: CIV-07-399-SPS, In the United States District Court Eastern District Oklahoma.
Deposition testimony was provided as a **treating physician** on January 30, 2009.

2. Victor LaSaxon vs. Eric Wolford Scott, II, Case Number: CJ-2007-6277, District Court of Oklahoma County, State of Oklahoma.
Deposition testimony was provided as a **treating physician** on April 29, 2009.

3. Julie Parrish vs. Lewis Hopkins, Case Number: CJ-2009-4779, District Court of Oklahoma County, State of Oklahoma.
Deposition testimony was provided as a **treating physician** on July 29, 2011.

4. Shirley Thompson vs. Harrah's North Kansas City, LLC, Case Number: 10CY-CV00579, Division 4.
Deposition testimony was provided as a **treating physician** on March 22, 2012.

5. Bradley and Sherri Jones vs. Dereck Peery, D.O., Case Number: CJ-2011-47, District Court of Carter County, State of Oklahoma.
Deposition testimony was provided as a **Medical Malpractice Defense Expert** on November 1, 2012.

6. Brittany Wiley-Anierobi vs. James O'Keefe and Geico Indemnity Co., Case Number: CJ-2012-218, District Court of Cleveland County, State of Oklahoma.
Deposition testimony was provided as a **treating physician** on November 7, 2012.

7. Robbie Emery Burke vs. Stanley Glanz, et al., Case No.: 11-CV-720-JED-PJC, In the United States District Court Northern District Oklahoma.
Deposition testimony was provided as a **Medical Malpractice Defense Expert** on October 2, 2013.

8. Jeffrey Semler vs. GEICO General Insurance Company, Case No: CIV-11-1354-D, In the United States District Court Western District Oklahoma.
Deposition testimony was provided in my capacity as Mr. Semler's prior **treating physician** and an **Independent Medical Examiner** on October 9, 2013.

8a. Jeffrey Semler vs. GEICO General Insurance Company, Case No: CIV-11-1354-D, In the United States District Court Western District Oklahoma.
Trial testimony was provided in my capacity as Mr. Semler's **prior treating physician** and an **Independent Medical Examiner** on January 16, 2014.

9. Nancy Owen vs. Timothy L. Grode, MD, Case No: CJ-2010-8866, District Court of Oklahoma County, State of Oklahoma.
Deposition testimony was provided as a **Medical Malpractice Defense Expert** on November 11, 2014.

10. Rose vs. Gelinas, et al.; Cause No: D-202-CV-2011-04260; State of New Mexico, County of Bernalillo; Second Judicial District.
Deposition testimony was provided as a **Medical Malpractice Plaintiff Expert** on March10, 2015.

11. Sowards vs. Wells, et al.; In the District Court of Carter County, State of Oklahoma,
Case No: CJ-2014-91
Deposition testimony was provided as an **Independent Medical Examiner** on March 11, 2015.

12. Shive-Martin v. GEICO; District Court of Oklahoma County, State of Oklahoma
Case No: CJ-2015-1591
Deposition testimony was provided as an **Independent Medical Examiner** on February 10, 2017.

13. Jerry Fulton v. Cutter Equipment, LLC and William Sweetin
Eastern District of Oklahoma; Case No. 17-CV-261-RAW
Deposition testimony was provided as an **Independent Medical Examiner** on March 6, 2018.

14. Andrew Kimble v. CR Operating Company d/b/a Apple Creek Estates, Apple Creek Apartments, and Apple Creek Estates, LLC
USDC Western District of Oklahoma; Case No. 17-CV-971-C
Deposition testimony was provided as an **Independent Medical Examiner** on March 30, 2018.

15. John Baker vs. Meredith Estes and State Farm Insurance Company
In the District Court of Oklahoma County, State of Oklahoma Court Case Number: CJ-2015-4262; Trial testimony provided as an **Independent Medical Examiner** on September 25, 2018.

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16. Diana Pepperman vs. Gerald Davenport
In the District Court of Cleveland County, State of Oklahoma
Court Case No. CJ-2017-550; Discovery deposition was provided as an **Independent Medical Examiner** on November 8, 2018.

17. John C. Vorva and Kimberly Vorva vs. Mercy Hospital Oklahoma City, Inc.; Mercy Clinic Oklahoma Communities, Inc.; Mercy Health; Radiology Consultants, P.C.; Charles Brekke, MD and Michael Plinsky, MD
In the District Court of Oklahoma County, State of Oklahoma; Case No.: CJ-2017-4622. Discovery deposition was provided as a **Medical Malpractice Defense Expert** on December 4, 2018.

18. Sheila Denise Brannon vs. Caple A. Spence, MD; In the District Court of Oklahoma County, State of Oklahoma; Case No: CJ-2014-2467. Discovery deposition was provided as a **Medical Malpractice Defense Expert** on March 15, 2019.

19. Peggy Johnson vs. Alliance Health Seminole, et al.; In the District Court of Oklahoma County, State of Oklahoma; Case No: CJ-2017-158. Discovery deposition was provided as a **Medical Malpractice Defense Expert** on April 3, 2019.

DOCUMENTS REVIEWED:

1. Amended complaint filed on July 13, 2018 in the United States District Court for the Eastern District of Oklahoma.

2. Responses to plaintiffs first set of interrogatories submitted on October 24, 2018 from Defendant Rob Frazier, in his official capacity as Muskogee County Sheriff.

3. First set of requests for production submitted October 24, 2018 to Defendant Rob Frazier in His Official Capacities.

4. Plaintiffs answers and responses To Defendant Board of County Commissioners of Muskogee County's first set of interrogatories and first set of requests for production submitted September 25, 2018.

5. Defendant Turn Key Health Clinics responses to plaintiffs first set of discovery requests submitted November 12, 2018.

6. Muskogee County Jail, file of Mr. James Buchanan.

7. St. John Medical Center radiology records for Mr. James Buchanan.

8. Hillcrest Medical Center medical records produced by plaintiff.

9. Turn Key medical records.

10. Turn Key medical records produced by plaintiff.

11. Oxford Healthcare (Reliant Home Health) medical records.

12. Green County Emergency Physicians medical records.

13. Advanced Pain Specialist of Tulsa medical records.

14. River West Medical Clinic and Kenneth Trinidad, D.O. medical and billing records.

15. Oklahoma Spine & Brain Institute medical records.

16. Oklahoma Spine & Brain Institute medical records produced by plaintiff.

17. Cardiology Clinic of Muskogee medical records.

18. Wagoner Community Hospital medical and billing records.

19. Wagoner Community Hospital medical records produced by plaintiff.

20. Muskogee County EMS medical records.

21. Muskogee EMS medical records produced by plaintiff.

22. Synaptic Resources medical records produced by plaintiff.

23. Copy of recent prescriptions produced by plaintiff.

24. Oklahoma Healthcare Authority medical records.

25. Oxford Healthcare (Reliant Home Health) billing records.

26. Reliant Home Health billing records produced by plaintiff.

27. Tulsa Hospitalists, Inc. billing records.

28. Tulsa Hospitalists, Inc. billing records produced by plaintiff.

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29. Advanced Pain Specialists of Tulsa billing records.

30. Oklahoma Spine & Brain Institute billing records.

31. Oklahoma Spine & Brain Institute billing records produced by plaintiff.

32. Cardiology Clinic of Muskogee billing records.

33. Muskogee County EMS billing records.

34. Muskogee County EMS billing records produced by plaintiff.

35. Muskogee EMS Jail Run billing records produced by plaintiff.

36. Hillcrest Medical Center billing records produced by plaintiff.

37. Wagoner Community Hospital billing records produced by plaintiff.

38. Billing liens produced by plaintiff from multiple providers.

39. Medical records from St. John Medical Center from 09/17/2016 through 09/34/2016. Emergency department medical record from St. John Medical Center dated 10/14/2016.

40. Medical records from Hillcrest Medical Center beginning on 11/15/2016.

41. Medical records from Synaptic Resources, LLC for interoperative neurophysiologic monitoring.

42. Sworn deposition testimony of James Buchanan taken on January 11, 2019.

43. Sworn deposition testimony of Rob Frazier, in his official capacity as Muskogee County Sheriff taken on February 6, 2019.

44. Sworn deposition testimony of Rosemary Kotas with Allied Home Health taken on February 23, 2019.

45. Sworn deposition testimony of Katie McCullar, LPN taken on February 19, 2019.

46. Medical records from Muskogee Regional Medical Center for Mr. James Buchanan.

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37. Medical records from Eastar Health System for Mr. James Buchanan with an admission date of 09/16/2016.

48. Medical records from CCOM Medical Group for Mr. James Buchanan.

49. Pharmacy records from Walgreens Pharmacy for Mr. James Buchanan.

50. Billing and medical records from Frank Greenhaw Chiropractic in Muskogee, Oklahoma for Mr. James Buchanan from 10/21/2016 through 10/31/2016.

51. Medical schedule sheet from Muskogee County Detention Center showing medical visit log for Mr. James Buchanan. An appointment is scheduled on 11/11/2016 to be evaluated by the physician on 11/15/2016.

52. Videotape of a visitor's phone conversation between Mr. Buchanan and his brother recorded on November 11, 2016.

SUMMARY OF MEDICAL RECORD DOCUMENT REVIEW:

I have been asked to perform a medical record review and provide my expert opinion and conclusions regarding the above referenced case. I also performed an Independent Medical Evaluation (IME) for Mr. Buchanan on April 26, 2019, the results of which are documented below.

On **September 16, 2016**, Mr. James Douglas Buchanan was involved in a bicycle versus automobile Motor Vehicle Collision (MVC). An Official Oklahoma Traffic Collision Report was completed on September 16, 2016 by Officer Gary Reasoner with the Muskogee Police Department. Officer Reasoner noted that Mr. Buchanan was riding a bicycle westbound on Okmulgee just before the intersection with Honor Heights Drive in Muskogee, Oklahoma. In the narrative portion Officer Reasoner labels Mr. Buchanan's bicycle as Unit 1 and the automobile, which was a black 1997 Toyota Corolla driven by Mr. Samuel Lewis, is labeled as Unit 2. Officer Reasoner documents that, Unit 1 was westbound in the outside lane of Okmulgee. Unit 2 was westbound in the inside lane. Unit 1 turned southbound in front of Unit 2. Unit 2 struck Unit 1. The point of impact is approximately 18 feet south of the north edge of Okmulgee and 50 feet east of the east edge of Honor Heights Drive. Officer Reasoner documented that his axon body camera was activated during the incident. The posted speed limit on West Okmulgee Drive is 35 mph. Officer Reasoner noted that Mr. Buchanan was not ejected from his vehicle, in this case a bicycle. He did not require extrication. Officer Reasoner noted that Mr. Buchanan had an injury severity that was "Non-incapacitating". He also noted that his injuries occurred to his trunk and his head. Officer Reasoner also noted that Mr. Buchanan's condition

was "Apparently Normal". He also notes that there was no occupant protection in use. Officer Reasoner then notes that Mr. Buchanan was transported by EMS to Muskogee Regional Medical Center. (DDR 30, 516-519)

On **September 16, 2016**, Muskogee County EMS responded to the MVC in which Mr. Buchanan was involved. The EMS personnel note that, Mr. Buchanan had pain over the left rib cage, head, right arm and right leg. They noted that he was riding his bicycle across the street and was struck by an oncoming vehicle. They document that the speed of the vehicle was unknown but that it had very minor damage. The windshield of the vehicle was not cracked. So, to the EMS personnel it did not appear that Mr. Buchanan went up over the hood. Mr. Buchanan denied any loss of consciousness to the EMS personnel. He had contusions and lacerations to the left side of the head. Mr. Buchanan was alert x 4 at the time that EMS evaluated him.

EMS noted that Mr. Buchanan was awake, alert, and oriented x4. He had a contusion and a 1 cm laceration to the left eye and he had a 1 cm puncture wound to the left cheek on the face. Mr. Buchanan's nose and teeth were present and normal. There was no blood in his airway. He denies any neck pain. His lung sounds were clear to auscultation and were equal bilaterally. He had an equal chest rise and fall. He denied any chest pain. He had pain in the left rib cage and a contusion at a level approximating the sixth and seventh ribs. He has pain on inspiration. There is no flail section of chest, he has good air movement and his abdomen is soft and nontender to palpation. He denies nausea and vomiting. His pelvis was stable. Had abrasions to his left knee, a contusion to the tibia but had good distal pulses. Mr. Buchanan had abrasions to the right elbow and pain in the right forearm and index finger on the right hand. There is no bruising or swelling noted to the right forearm.

Mr. Buchanan was placed on a spinal board and in a cervical collar. The pulse oximeter and four lead cardiac monitor were applied. A 16 gauge IV was established in the left upper extremity with a heplock. He was then transported to Eastar without incident or change in condition. Upon arrival at the hospital in Muskogee, he was taken to the CT scanner then returned to the emergency department and placed in a hospital bed via the long spinal board. A report was provided and care was turned over to the emergency department group. (Muskogee County EMS 002-007)

On **September 16, 2016**, Mr. Buchanan was admitted to Eastar Health System previously known as Muskogee Regional Medical Center and now owned under the St. Francis Health System. Mr. Buchanan was admitted at 2144 on September 16, 2016 via EMS.

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Mr. Buchanan was treated by Dr. Kevin Keirl who was the emergency room physician. He noted that Mr. Buchanan was riding a bicycle and was hit by an automobile. He has a large abrasion on the left side of the face. He complains of pain in the head and left ear. He cannot remember any details of the accident but is awake and alert on arrival to the ER. Mr. Buchanan also reports some pain in the right-hand and wrist. He denies any focal weakness or numbness. The pain in the head is moderate but he has a primary complaint of pain in his neck, which is severe with the cervical collar, causing great discomfort. He also reports some pain in the chest over both sides of the ribs. (St. Francis Muskogee 048)

On physical examination he is noted be alert and oriented x 3. He has multiple facial abrasions and a laceration through the upper part of the left tragus on the ear. He has no mandibular or maxillary instability. Mr. Buchanan denies any pain on palpation to his cervical spine but states that the cervical collar is causing him a great amount of discomfort. He is noted to have tenderness over the left ribs with diminished breath sounds bilaterally. His abdomen was soft and nontender. He has tenderness over the right wrist and hand. He is nontender in the lower extremities bilaterally. He has no midline or vertebral tenderness over his back. He has some muscle tenderness in the lumbar region. (St. Francis Muskogee 050)

CT scan of the chest with IV contrast was performed and the report was dictated by Dr. John Crouch. Dr. Crouch's impression included 1. There are acute appearing fractures involving the left fourth, fifth, sixth, seventh ribs, at their lateral aspects. 2. There is a moderate left anterior pneumothorax extending from the left apex to the left base occupying less than 30% of the volume of the left hemithorax and with no specific signs of tension pneumothorax. 3. The prevertebral or retropharyngeal hemorrhage seen in the neck extends into the posterior mediastinum with this portion of the hematoma within the posterior mediastinum measuring approximately 4.2 x 5.4 x 9.0 cm. No IV contrast extravasation/active arterial bleeding within the hematoma. (St. Francis Muskogee 061-062)

A CT scan of the abdomen and pelvis with IV contrast was performed and the report was dictated by Dr. John Crouch. Dr. Crouch's impression includes 1. Findings in the lower thorax including left-sided pneumothorax and left-sided rib fractures are described on the CT chest dictation of the same day. 2. There is colonic diverticulosis without evidence of acute diverticulitis. 3. No other acute traumatic CT pathology of the abdomen or pelvis. (St. Francis Muskogee 064)

A CT scan of the cervical spine without IV contrast was performed and the report was dictated by Dr. John Crouch. Dr. Crouch noted in his findings that there was no acute cervical spine fracture. There is multilevel disc height loss,

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endplate degenerative spurring and uncinate process and facet hypertrophy. There is diffuse osteopenia. There is a grade 1 anterolisthesis of C3-4 and C4-5, possibly degenerative although posttraumatic cannot be excluded. Discs/spinal canal/neural foramina reveal that there is multilevel neural foraminal stenosis. The soft tissues were unremarkable. In the retropharyngeal space there is bruising/hematoma lateral left base of the neck and left supraclavicular region and additional large discrete hematoma in the prevertebral or retropharyngeal region extending along the length of the neck from C1-T1 and likely extending into the mediastinum. The maximum size of the prevertebral hematoma is approximately 9.4 x 2.4 x 14.4 cm. Possibly related to injury of the anterior longitudinal ligament of the cervical spine. His impression includes 1. There is bruising/hematoma lateral left base of the neck and left supraclavicular region and additional large discrete hematoma in the prevertebral or retropharyngeal region extending along the length of the neck from C1-T1 and likely extending into the mediastinum. The maximum size of the prevertebral hematoma is approximately 9.4 x 2.4 x 14.4 cm. Possibly related to injury of the anterior longitudinal ligament of the cervical spine. 2. No acute cervical spine fracture. (St. Francis Muskogee 065)

A CT scan of the head without IV contrast was performed and the report was dictated by Dr. Delphia Clarke. The impression includes 1. Extra calvarial soft tissue swelling lateral to the left orbit and anterior and lateral on the left. 2. Well delineated low attenuation area in the right cerebellum consistent with prior infarction. Motion artifact degrades some of the images. 3. No acute intracranial hemorrhage. (St. Francis Muskogee 067)

X-rays of the right hand were performed and read by Dr. Heath VanDerlinder. His impression revealed "No acute findings." (St. Francis Muskogee 060)

X-rays of the right wrist were performed and read by Dr. Heath VanDerlinder. His impression revealed "No acute findings."

A chest x-ray was performed following placement of the chest tube and a second x-ray was performed following partial retraction of the chest tube. Both films were read by Dr. Heath VanDerlinder. His impression for the first x-ray reveals 1. Placed left thoracostomy tube. 2. Left basilar atelectasis versus scarring. (St. Francis Muskogee 058)

The second chest x-ray read by Dr. Heath VanDerlinder, revealed 1. Partially retracted left thoracostomy tube without other change. (St. Francis Muskogee 057)

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Dr. Kierl performed placement of a left-sided chest tube for the left-sided pneumothorax identified on the chest CT scan. This was performed under local anesthetic with conscious sedation. (St. Francis Muskogee 050)

Laboratory studies reveal that Mr. Buchanan's white blood cell count was elevated at 16.3 K/cubic millimeter. (St. Francis Muskogee 051)

Dr. Kierl then made brief notes regarding the findings on the imaging studies. (St. Francis Muskogee 052-053)

Dr. Kierl, in his conclusions, documents that Mr. Buchanan has multisystem trauma and had a chest tube placed for pneumothorax. He will be transferred to St. John for further treatment and care. Dr. Kierl notes, "my concern is that though there is no active extravasation of contrast into hematoma, in retropharyngeal space there's concern that he may require further intervention." Never with any airway instability here - only issue was agitation after he became briefly hypoxic from sedation during chest tube placement. Mr. Buchanan was accepted by Dr. Rachel Tyler at St. John Medical Center in Tulsa, Oklahoma. (St. Francis Muskogee 055)

Dr. Kierl's clinical impression included pneumothorax, multiple rib fractures and retropharyngeal hematoma. The disposition was to an acute care hospital level 2. (St. Francis Muskogee 055)

On **September 17, 2016** at 0354, Mr. Buchanan was taken by Muskogee County EMS from Eastar Health System and transported to St. John Medical Center in Tulsa, Oklahoma. EMS gave him an initial complaint of pain secondary to trauma and a pneumothorax. They also documented that their primary impression was pneumothorax which was traumatic. They documented the provider impression was a hematoma to the retropharyngeal space, possible rib fractures on the left side and a pneumothorax. EMS documented that they brought Mr. Buchanan to Eastar after being hit by a car while riding his bicycle. He was not admitted and was treated only in the emergency department. They noted that he underwent laboratory studies and the x-rays and imaging studies previously documented. He had a chest tube placed on the left side with a vacuum reservoir. They also note that he was diagnosed with a retropharyngeal hematoma, fractures to the left fourth, fifth, sixth and seventh ribs. He has a left pneumothorax that required the chest tube placement. They noted that he was awake, alert, and oriented x 4. He has bruising and minor lacerations from above the left eyebrow toward the left ear and the lower left jaw area. Patient denies any hearing or vision problems. He was noted to have a chest tube placed on the left side. Mr. Buchanan stated that he had pain that was 7/10 on deep inspiration exhalation. His abdomen was soft and nontender. He denied any nausea, vomiting or diarrhea. Mr. Buchanan was noted to have tenderness

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in both arms, with the right arm tender to touch. He has minor abrasions and lacerations to both arms and legs. EMS noted that Mr. Buchanan is being transferred for consultation with a specialist. He requires transfer via EMS in order to monitor the chest tube with supplemental oxygen and cardiac monitoring. They note that Mr. Buchanan was placed on a cot and secured with safety straps. He was transported to St. John Medical Center without incident and his care was transferred over to the RN. (Muskogee County EMS 011-012)

On **September 17, 2016** at 0559, Mr. Buchanan was admitted to St. John Medical Center. (St. John Medical Center 0003)

Mr. Buchanan was initially brought in to the emergency department at St. John Medical Center. They note that he arrived on September 17, 2016 at 0446 and he stayed in the emergency department until he was transferred to the ICU at 0704. (St. John Medical Center 0021)

A portable chest x-ray was performed on September 17, 2016 at 0633. The chest x-ray revealed left-sided chest tube directed towards the apex. No left-sided pneumothorax. Moderate soft-tissue gas left chest wall. Hypoinflation of the lungs with discoid atelectasis left lower lobe. The heart is normal in size. (St. John Medical Center 0936)

On **September 17, 2016** at 0559, Dr. Rachel Tyler the trauma/surgical critical care physician who accepted Mr. Buchanan in transfer dictated a history and physical examination. She gives a brief history of the automobile versus bicycle accident. She describes a possible loss of consciousness (LOC). She described the findings on the CT scan at Eastar. She notes that he had multiple left sided rib fractures and a pneumothorax for which a chest tube was placed and he was transferred to St. John for further care. Brief physical examination revealed no neurologic deficits. She noted the left chest tube in place to wall suction with no air leak. The breath sounds were clear and equal bilaterally. He had normal chest expansion. He was noted to have a Glasgow Coma Scale of 15. She documents the radiology results from Eastar, including the head CT, cervical spine CT, chest CT and the abdomen and pelvis CT. Her assessment includes a 54-year-old male status post automobile versus bicycle. **Mr. Buchanan has a prevertebral hematoma measuring 9.4 x 2.4 x 14.4 cm.** He has a left pneumothorax and multiple left rib fractures. She recommends that he be admitted to the trauma floor for chest tube management, pain control and **have a consultation performed by neurosurgery**. He should be NPO with IV fluids for now. The note appears to have been dictated by Dr. William Fleischer who is the trauma resident and Dr. Rachel Tyler added her attending note at the end. She briefly mentions his history and discusses the rib fractures with a pneumothorax along with the large prevertebral hematoma extending from the cervical to thoracic anterior to the spinal cord with concern for a ligament

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injury. She documents that Mr. Buchanan is neurologically intact with an Aspen collar in place and he should be on full spine precautions. Consult neurosurgery for possible ligament injury. Pulmonary toilet and pain control and admit to the ICU for airway watch and neurologic checks. (St. John Medical Center 0035-0037)

On **September 17, 2016** at 0747, the surgical resident Dr. Jacob Landry dictated the initial ICU note. He documents that there has been nothing acute since being admitted to the ICU. He does document that Mr. Buchanan states that he is having difficulty swallowing but has no problems with oral secretions. Mr. Buchanan's pain is controlled with pain medication and he does have some dyspnea with deep breathing on the left. Initial laboratory results reveal that the white blood cell count is still elevated at 11.4. They ordered the chest x-ray and read the radiologist results into the record. Their assessment and plan included, hospital day 1 status post fall from bicycle. Injuries include **1. There is bruising/hematoma lateral left base of the neck and left supraclavicular region and additional large discrete hematoma in the prevertebral or retropharyngeal region extending along the length of the neck from C1-T1 and likely extending into the mediastinum. The maximum size of the prevertebral hematoma is approximately 9.4 x 2.4 x 14.4 cm. Possibly related to injury of the anterior longitudinal ligament of the cervical spine.** (This is an exact duplication of the report by the radiologist at Eastar for the cervical spine CT that the radiologist listed under 1. In his report.) There is a left pneumothorax, status post left chest tube placement on 9/17/16. (The chest tube was placed on 9/16/16.) There are multiple left rib fractures. Their plan is to leave the left chest tube to drainage, use pain control, use and incentives barometer for deep breathing obtain a neurosurgery consultation from Dr. Rapacki and to keep the Aspen collar in place until further notice. Dr. Jacob added an addendum stating they would perform an x-ray of the right upper extremity from the elbow to the hand for a secondary survey. There was also an addendum from the attending Dr. Michael Charles. He notes that Mr. Buchanan was seen during teaching rounds at the bedside. (St. John Medical Center 0784-0786)

On **September 17, 2016** at 0900, Mr. Buchanan underwent three views of the right wrist and hand. The radiologist documents 1. No acute fracture or dislocation evident. 2. Consider follow-up radiographs in 10 days if there is clinical concern for potentially significant occult pathology. (St. John Medical Center 0937-0938)

On **September 17, 2016** at 0921, Mr. Buchanan underwent x-rays of the right elbow. The radiologist's impression revealed 1. No acute fracture or dislocation evident. 2. Consider follow-up radiographs in 10 days if there is clinical concern for potentially significant occult pathology. 3. Degenerative changes as detailed above. The radiologist described "Chronic appearing erosion

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suggestive of gout versus rheumatoid arthritis or other degenerative change noted in the ventral aspect of the distal humerus and the lateral view. Chronic appearing spurring noted at the medial margin of the trochlea. Chronic fragmentation adjacent to the radial neck medially. (St. John Medical Center 0939)

On **September 17, 2016** at 0922, Mr. Buchanan underwent an x-ray of the right forearm. The radiologist documents 1. No acute fracture or dislocation evident. 2. Consider follow-up radiographs in 10 days if there is clinical concern for potentially significant occult pathology. (St. John Medical Center 0940)

On **September 17, 2016** at 1157, Dr. Thomas Rapacki performed a neurosurgery consultation for Mr. Buchanan. He gives a brief history of Mr. Buchanan's injury. Mr. Buchanan reports left dorsal neck pain, midline upper back pain and odynophagia. He also reports a burning sensation radiating distally in his right upper extremity into his index finger. On physical examination, Mr. Buchanan is noted to be well developed and well-nourished in a recent cervical collar. There were noted to be extensive abrasions and lacerations of the left face adjacent of the ear. There is blood noted in the external auditory canal. There is no drainage from the nose or the right ear. There is no cervical spinous process step-off. He notes his back is nontender with no focal deformity. Neurologically, Mr. Buchanan is noted to be awake, alert and fully oriented. There were no cranial nerve deficits identified. He does state there is mild dysphonia. A screening motor examination of the extremities was performed, that reveals no weakness. Sensation to pinprick is preserved. Hoffman's and Babinski sign's are absent. His gait was not assessed. Dr. Rapacki documents the laboratory data and the previous radiographic data. Dr. Rapacki's impression was an adult male who was struck by a vehicle. He presents with neck and upper back pain and electrical pain radiating through the right upper extremity to the index finger. There is no clear motor or sensory deficit. Imaging is remarkable for moderate multilevel cervical degenerative disc disease and **a large extensive prevertebral hematoma involving the cervical spine and the upper thoracic spine**. Dr. Rapacki's recommendations were to, 1. Continue close observation in the intensive care unit. Notify me promptly of any deterioration of neurologic function. 2. Continue rigid cervical collar mobilization. 3. **Obtain magnetic resonance imaging of the cervical and thoracic spine to screen for soft tissue injury to explain the prevertebral hematoma.** 4. Obtain platelet function assay to screen for platelet aggregation dysfunction and correct any dysfunction evident. (St. John Medical Center 0032-0033)

On **September 17, 2016** at 1423, Mr. Buchanan underwent an MRI scan of the cervical spine without contrast. The MRI report was read by Dr. Ian Fischer. His findings included encephalomyalacia from prior insult involving the inferior right

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cerebellum. Suspect a subtle dorsal epidural hematoma at C4-5 to C5-6 that is 0.2 cm or 2 mm in thickness. Paravertebral soft tissues reveal significant soft tissue edema predominately in the prevertebral space also noted in the dorsal lateral paraspinal musculature. Mild-to-moderate stranding of the interspinous ligament, however the posterior longitudinal ligament, ligamentum flavum and tectorial membrane appears to be intact. Potential strain of the longitudinal ligament caudal to the anterior arch of C1 on image 80 of series 8 suspected. Transverse ligament cannot be evaluated as the patient prematurely terminated the exam. Loss of the normal flow void in the left vertebral artery is concerning for compromised blood flow. The vertebral body signal reveals subtle edema involving the right occipital condyles. There is noted to be chronic wedging of the T1 superior endplate and T2 superior endplate. Subtle straightening of the normal cervical lordosis, 2 mm anterolisthesis of C3 on C4 and C4 on C5. Normal vertebral body morphology. Mild diffuse decreased disc height with subtle endplate and uncovertebral spurring. At the C2-C3 level, there is a minimal disc bulge with a small annular fissure. No central canal stenosis. Mild posterior element hypertrophy without significant foraminal stenosis. At the C3-C4 level, there is a minimal disc bulge with mild to moderate facet hypertrophy and mild uncovertebral spurring. At the C4-C5 level, there is a subtle disc bulge. Moderate posterior element hypertrophy with no significant central stenosis. Mild to moderate foraminal stenosis bilaterally, left greater than right. At the C5-C6 level, there is a disc bulge with at least moderate facet hypertrophy and uncovertebral spurring on the left. No central stenosis. At least moderate to marked left and mild right foraminal stenosis. At the C6-C7 level, there is a mild disc bulge and mild to moderate posterior element hypertrophy with no central canal stenosis. There is mild right and mild to moderate left foraminal stenosis. At the C7-T1 level, there is no disc herniation seen and the posterior elements are unremarkable. The central canal and neural foramina are patent.

The radiologist's impression includes 1. Compromise flow of the left vertebral artery. **2. Significant soft tissue swelling of the neck without obvious fracture.** 3. Artifact versus strain of the anterior longitudinal ligament at C1-C2. **4. Very subtle 2 mm thick mid cervical dorsal epidural hematoma without significant resultant mass effect/stenosis. No spinal cord edema**. 5. Otherwise, as detailed above. **Impression #1 was briefly discussed with Dr. Rapacki via telephone on 9/17/2016 3:02 PM.** (St. John Medical Center 0941-0942)

On **September 18, 2016** at 0702, a trauma ICU progress note was dictated by Dr. Zakiya Shakir. The note was amended by Dr. Gajal Kumar. This is hospital day #2. The diagnoses list included 1. 2 mm thick mid cervical dorsal epidural hematoma without significant resultant mass effect/stenosis. 2. Left pneumothorax. 3. Multiple left rib fractures. 4. Compromised flow of the left

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vertebral artery. 5. Artifact versus strain of the anterior longitudinal ligament at C1-C2.

There were no acute events overnight. Mr. Buchanan is requiring Ativan for symptoms of **tachycardia and diaphoresis**. They document that Mr. Buchanan's white blood cell count has now elevated to 18.1. They re-document the radiographic findings. On physical examination he is noted to have a Glasgow Coma Scale of 15. They document that his neck has an injury and a prevertebral hematoma. They also document an anterior longitudinal ligament strain of C1-C2. The C-spine has not been cleared and the C-collar is in place. The left sided chest tube put out 30 mL of fluid. They document that there is no musculoskeletal injury. The thoracic and lumbosacral spine have been cleared. Under assessment and plan, they list the same diagnoses as above. Dr. Rapacki was notified of the findings on the MRI scan. Their plan is to continue with pain control as needed. Give Ativan for agitation and for alcohol withdrawal protocol. Continue with cervical spine precautions and keep the Aspen collar in place. (St. John Medical Center 0787-0791)

On **September 18, 2016** at 1309, Mr. Buchanan was again seen in consultation by the neurosurgeon, Dr. Rapacki. He documents that Mr. Buchanan has no complaints. He states that they did not complete the MRI study of the cervical spine and thoracic spine yesterday due to Mr. Buchanan's agitation. Dr. Rapacki documents a neurologic examination which is normal. He reviews the radiographic studies with the incomplete MRI scan of the cervical spine that documented no cord compression and no significant right C6 foraminal stenosis. He noted that the white blood cell count is 18,100, hematocrit 32.2% and platelet count 265,000.

Dr. Rapacki's impression includes 1. **Traumatic prevertebral hematoma.** 2. Suspected left vertebral artery dissection v. Occlusion of unclear chronicity.

Dr. Rapacki's recommendations include that Mr. Buchanan is not a candidate for systemic anticoagulation. Continue rigid cervical collar immobilization. Complete the MRI imaging of the cervical and thoracic spine. (St. John Medical Center 0792)

On **September 18, 2016** at 1445, Mr. Buchanan returned to radiology to undergo a CT arteriogram of the head and neck. This was due to the diminished flow in the left vertebral artery identified on MRI scan. The CT arteriogram of the neck revealed subcutaneous gas involving the left anterior chest wall. The right vertebral artery is patent. There is diminished flow involving the V2 segment of the left vertebral artery beginning at the C6-C7 level. Reconstitution of flow of the more distal left vertebral artery at the C2-C3 level. No hemodynamically significant stenosis or aneurysm otherwise. The impression of the radiologist

includes, confirmation of dissection of the left V2 vertebral artery measuring approximately 5.8 cm in cranial to caudal dimension with distal reconstitution. No hemodynamically significant stenosis otherwise. Soft tissue emphysema involving the left anterior chest wall with paraspinus edema, better visualized on the prior MRI.

The CT arteriogram of the head revealed, scattered bilateral subclinoid ICA segment atherosclerotic vascular calcifications. The vertebral arteries are codominant. Right inferior cerebellar encephalomyalacia is identified. No hemodynamically significant stenosis or aneurysm otherwise. (St. John Medical Center 0945)

On **September 18, 2016** at 1546, Mr. Buchanan underwent a repeat of the cervical MRI scan without contrast. The findings included that the apical ligament was intact, the anterior atlantoaxial and occipital atlantal membranes had a grade 1-2 sprain involving the anterior atlantoaxial membrane. The majority of the fibers are intact. The occipital and lateral membrane is intact. Anterior longitudinal ligament is intact. The posterior atlantoaxial and occipitoatlantal membranes are intact. The nuchal ligament is intact. The flaval ligament is intact. The interspinous and supraspinous ligaments reveal interspinous muscle edema as previously described. The transverse ligament is intact. There is aberrant flow involving left vertebral artery. There is soft tissue edema and fluid about the neck and a tiny dorsal epidural hematoma are unchanged from the prior day. An addendum was dictated that states, "Low grade sprain may also involve the anterior occipitoatlantal membrane. Fibers intact." (St. John Medical Center 0946)

On **September 18, 2016** at 1646, Mr. Buchanan underwent an MRI scan of the thoracic spine without contrast. The impression revealed, "**Paraspinous edema extending into the upper thoracic spine without evidence of fracture, subluxation, or acute ligamentous injury.** Minimal rightward curvature of the upper thoracic spine. Bilateral atelectasis versus trace effusions." (St. John Medical Center 0947)

On **September 19, 2016** at 0616, a clinic note was dictated by Dr. Steven Drywater and an addendum documented by the attending, Dr. Michael Charles. This is hospital day #3 and the problem list includes 1. A 2 mm thick mid cervical dorsal epidural hematoma without significant resultant mass effect or/stenosis. 2. Left pneumothorax. 3. Multiple left rib fractures. 4. Compromise flow in the left vertebral artery. 5. Artifact versus strain of the anterior longitudinal ligament at C1-C2.

The vital signs and laboratory studies are documented. The white blood cell count has dropped down into the normal range. The imaging studies continue

to be documented. The CT arteriogram of the head/neck was added to the list. They noted 19 active medications. Physical examination revealed a Glasgow Coma Scale of 14. For Mr. Buchanan's cervical spine, they noted a prevertebral hematoma and in the anterior longitudinal ligament strain of C1-C2. They document that they are going to continue with the same plan. The chest tube is noted to be in place. (St. John Medical Center 0793-0798)

On **September 19, 2016** at 1408, Dr. Rapacki sees Mr. Buchanan for follow-up in the ICU. He notes that Mr. Buchanan awakens with stimulus. He is oriented to person, year and hospital. He is sedated for EtOH withdrawal. He moves all extremities to command. He documents strength as being normal in the tested muscle groups. Dr. Rapacki documents that the MRI scan of the cervical spine documents a low-grade sprain of the anterior atlantoaxial membrane with the majority of fibers intact and stable aberrant flow involving the left vertebral artery, soft tissue edema and fluid about the neck, and a tiny dorsal epidural hematoma. The MRI scan of the thoracic spine documents **paraspinus edema extending into the upper thoracic spine without evidence of fracture, subluxation, or acute ligamentous injury.**

CT arteriogram of the head and neck documents confirmation of dissection of the left V2 vertebral artery.

Dr. Rapacki documents his impression as 1. Traumatic prevertebral hematoma cervical ligamentous strain. 2. Left vertebral artery dissection. 3. Sedated for EtOH withdrawal.

His recommendations include maintaining the rigid cervical collar, no anticoagulation or NSAID's, and continue ICU observation. (St. John Medical Center 0799-0800)

On **September 20, 2016** at 0117, a portable chest x-ray was performed. The indication was for respiratory distress. The x-ray reveals shallow lung volumes, with broncovascular crowding. There is a moderate left layering pleural effusion, with opacities throughout the left lung which likely represent atelectasis. The heart and vessels are within normal limits. The osseous structures are unremarkable. (St. John Medical Center 0950)

On **September 20, 2016** at 0707, an ICU note is documented for hospital day #4. The same problem list is noted. They noted that the left chest tube had been pulled out by the patient. They noted that Mr. Buchanan had been agitated throughout the night but to a lesser extent than the night before. He had no hallucinations at night and no other complaints. They document that his white count is 12.9 and elevated. They documented the findings on the portable chest x-ray from earlier in the morning. The assessments are unchanged. The

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plan is to continue following neurosurgery advice. They document that Mr. Buchanan pulled out the chest tube yesterday and chest x-ray reveals a small stable effusion. (St. John Medical Center 0801-0806)

On **September 20, 2016** at 1344, Dr. Rapacki saw Mr. Buchanan in the ICU. He noted that it is hospital day #4. His impression continues to be, 1. Traumatic prevertebral hematoma cervical ligamentous strain. 2. Left vertebral artery dissection. 3. Sedated for EtOH withdrawal. He recommended maintaining the rigid cervical collar, no anticoagulation or NSAID's, and it was okay to transfer to 10 W. or E. with a sitter. (St. John Medical Center 0807-0808)

On **September 20, 2016** at 1833, Mr. Buchanan underwent cervical spine flexion extension radiographs. The radiologist documented that there is a 3 mm anterolisthesis at C3-4 and C4-5, likely related to facet arthropathy, increased at C3-4 on flexion to approximately 5 mm. Alignment is otherwise normal. No widening of the atlantoaxial space. No other significant findings. (St. John Medical Center 0951)

On **September 21, 2016** at 1303, Mr. Buchanan underwent a PA and lateral chest x-ray. The impression revealed, there is a curvilinear density noted in the left upper chest. This could represent a plural-based mass or loculated collection. There also appears to be an irregular contour to the central chest which is worse since the prior study. Probably underlying effusion. Would recommend CT of the chest. (St. John Medical Center 0952)

On **September 21, 2016** at 1349, Dr. Kumar and Dallas Buck APRN-CNP evaluated Mr. Buchanan at St. John Medical Center. They noted that he was in bed and somnolent. The patient has meditation and was given Ativan. No sign of alcohol withdrawal. **They noted that he was febrile this morning with a temperature of 39.8°C which is equivalent to 103.64°F**. His physical examination was basically unchanged except for continuing somnolence. Under their diagnoses they now add "7. **Fever-Unknown etiology**". Their plan is to perform a chest x-ray and possible chest CT scan to further evaluate the pleural fluid. They are going to perform urinalysis with cultures and blood cultures now. They recommended stopping the Ativan for now since Mr. Buchanan currently has no signs of EtOH withdrawal. Continue pain management and continue PT/OT for speech therapy. The attending, Dr. Kumar, adds an addendum that states, CT chest shows large pleural effusion on Left chest, febrile today, cultures ordered, will place chest tube. (St. John Medical Center 0809-0812)

On **September 21, 2016** at 1459, Mr. Buchanan underwent a CT scan of the chest without contrast. The impression revealed, "new loculated left pleural fluid with adjacent rib fractures, suggesting hemothorax." (St. John Medical Center 0953)

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On **September 21, 2016** at 1826, Mr. Buchanan was seen by Dr. Rapacki. He notes that he awakens to voice and is oriented to person and place. He is awaiting placement of a left chest tube for hemothorax. Moves all extremities to command. Continue treatment of EtOH withdrawal. The rigid cervical collar is still in place. Dr. Rapacki documents his impressions now as, 1. **Traumatic prevertebral hematoma cervical ligamentous strain**. 2. Left vertebral artery dissection. 3. Sedated for EtOH withdrawal.

His plan includes, to maintain the rigid cervical collar, no anticoagulation or NSAIDs, will attempt repeat flexion and extension cervical spine x-rays tomorrow. (St. John Medical Center 0813-0814)

On **September 21, 2016** at 2011, a left thoracostomy tube was placed. A large amount of fluid came out initially. (St. John Medical Center 0815)

On **September 21, 2016** at 2019, a portable chest x-ray was taken following a tube placement. The findings reveal, interval placement of a left-sided chest tube. Decreased size of left-sided loculated pleural effusion/hemothorax. Moderate volume left pleural fluid remains. Partial compressive atelectasis of the left lung, with improved inflation of the left lower lobe and lingula since the prior exam. The right lung is adequately inflated and clear. Mild cardiomegaly. Multiple left-sided rib fractures. (St. John Medical Center 0954)

On **September 22, 2016** at 0218, a portable chest x-ray was performed. They noted the left chest tube is unchanged with decreased size of the apical component of the left pleural effusion/hemothorax. The inferior component is unchanged. Atelectasis of the left lung is stable. Right lung is clear. Stable cardiomegaly. (St. John Medical Center 0955)

On **September 22, 2016** at 0610, Dr. Drywater and the attending Dr. Michael Charles evaluate Mr. Buchanan. They note that this is hospital day #6. They document the left chest tube placement the prior day. Mr. Buchanan was transferred back to the ICU overnight and was given Dilaudid and became over sedated requiring several doses of Narcan. Their diagnoses continue to be listed as the same. New procedure was performed with replacement of the left chest tube. (St. John Medical Center 0816-0821)

On **September 22, 2016** at 1156, Mr. Buchanan is seen by Dr. Rapacki. He notes that Mr. Buchanan is more alert today and is oriented to person, place, September 2016 and to situation. Mr. Buchanan reports dorsal neck pain persists. He denies radiating extremity pain, weakness or numbness. He has pain at chest tube site. He is noted to be voiding spontaneously. He notes the neurologic examination to be within normal limits. His diagnoses include 1.

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Traumatic prevertebral hematoma cervical ligamentous strain. 2. Left vertebral artery dissection. 3. EtOH withdrawal. He recommends maintaining the rigid cervical collar, no anticoagulation or NSAIDs, attempt repeat flexion and extension cervical spine x-rays when the patient's pain permits. (St. John Medical Center 0822)

On **September 22, 2016**, antibiotic therapy was started with the Zosyn (pipercillin-tazobactam) and vancomycin. (St. John Medical Center 0095)

On **September 23, 2016** at 0619, Mr. Buchanan underwent a portable chest x-ray. The left chest tube was noted to be unchanged. The lungs are better inflated on this examination. The moderate left pleural effusion is unchanged, with persistent airspace opacities in the left lung likely representing atelectasis. The right lung is clear. Improving central vascular congestion. Heart size is stable. (St. John Medical Center 0956)

On **September 23, 2016** at 0653, Mr. Buchanan is again seen by the ICU staff including Dr. Drywater and the attending Dr. Michael Charles. They note that he was intermittently confused and agitated overnight but was afebrile with no drainage from the chest tube. Otherwise there were no acute events. The diagnoses list remains the same. The previously performed blood culture result is reported and the Gram stain indicates Gram-positive cocci in clusters. Mr. Buchanan is now on antibiotic day #2 with vancomycin and Zosyn. (St. John Medical Center 0823-0828)

On **September 23, 2016** at 1346, Dr. Rapacki goes by to see Mr. Buchanan on Hospital Day #7 and documents that Mr. Buchanan is sedated following administration of lorazepam and haloperidol for agitation. He recommended continuing the rigid cervical collar immobilization until the patient can cooperate with flexion and extension x-rays of the cervical spine to document stability. (St. John Medical Center 0829)

On **September 24, 2016** at 0702, Mr. Buchanan is evaluated by the trauma team on Hospital Day #8. They note that he was intermittently confused/agitated overnight, otherwise no acute events. The left chest tube is in place to water seal drainage. **The blood culture results are now reported and reveal a Methicillin-Sensitive Staph aureus was isolated in the blood cultures.** The diagnoses were documented as the same. They documented that Mr. Buchanan was afebrile overnight on day #3 of vancomycin and Zosyn for the positive blood cultures. They document the blood cultures are pending sensitivities. They note that Mr. Buchanan has a reddened area to the coccyx, healing abrasions to the face and a reddened area to the right elbow with healing abrasions that has some swelling and possible fluctuance. (St. John Medical Center 0830-0835)

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On **September 24, 2016** at 0821, a portable chest x-ray was performed. There is a left-sided chest tube. Left basilar infiltrates and the fusion again noted with left-sided rib fractures. No pneumothorax. Cardiomediastinum silhouette is enlarged. (St. John Medical Center 0957)

Right elbow x-rays were also performed due to the swelling. The findings revealed degenerative changes in the elbow joint. No obvious fracture or dislocation. Small elbow joint effusion. (St. John Medical Center 0958)

On **September 24, 2016** at 1410, Dr. Rapacki evaluated Mr. Buchanan. He notes that he has no complaints but reports mild neck stiffness. He denied neck pain, extremity pain, numbness or weakness. He denied any chest pain or shortness of breath. Neurologic examination was within normal limits. The white blood cell count was noted to be 16,000. Dr. Rapacki recommended performing flexion-extension x-rays of the cervical spine to assess the stability. (St. John Medical Center 0837)

On **September 24, 2016** at 1448, flexion and extension x-rays of the cervical spine were performed. The findings revealed, in the neutral position there is 2 mm of anterolisthesis of C2 on C3, 3 mm of anterolisthesis of C3 on C4, and 4 mm of anterolisthesis of C4 on C5. Alignment is not substantially changed with flexion or extension, **with little range of motion demonstrated**. The atlantodens interval is normal. Cervical vertebral body heights are normal. Mild prevertebral soft tissue swelling. Moderate intravertebral disc height loss and endplate degenerative changes at C5-C6 and C6-C7. Advanced facet arthropathy and uncovertebral joint hypertrophy throughout the cervical spine. (St. John Medical Center 0959)

On **September 25, 2016** at 0101, a portable chest x-ray was performed. The left chest tube remains in a similar position. There is no interval change in appearance of the heart or lungs. Left pleural effusion and left lung atelectasis or pulmonary contusions persist. No pneumothorax. Left rib fractures are noted. (St. John Medical Center 0960)

On **September 25, 2016** at 0724, Mr. Buchanan is evaluated by the trauma staff, the note is dictated by Dr. Adolpho Diaz and his attending is Dr. Rachel Tyler. Dr. Tyler is concerned with the right elbow cellulitis and recommends they continue with vancomycin and Zosyn. She also recommends a CT scan of the elbow to rule out an abscess or joint effusion secondary to the MSSA bacteremia. She recommends repeat blood cultures and to continue alcohol withdrawal protocol. She also recommends removing the chest tube at this point and keep the Aspen collar in place. They will continue with pain management, physical therapy and occupational therapy. (St. John Medical Center 0838-0839)

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On **September 25, 2016** at 1811, Mr. Buchanan underwent a CT scan of the right upper extremity with contrast. The reason for the examination is stated as, "Infection above and below elbow with contrast only". The impression revealed 1. Degenerative changes of the elbow joint. 2. Evidence of cellulitis. 3. No evidence of osteomyelitis is appreciated. No acute fracture or dislocation. If clinical concern for osteomyelitis persists, **further evaluation with MRI or nuclear medicine bone scan is suggested**. 4. No discrete drainable abscess is seen. No evidence of a significant joint effusion. (St. John Medical Center 0961)

On **September 25, 2016** at 1841, Dr. Rapacki dictated a brief note that "The patient is off the floor for testing." (St. John Medical Center 0840)

On **September 25, 2016** at 2005, Mr. Buchanan underwent a portable chest x-ray following the removal of the chest tube. The findings revealed, the cardiomediastinal silhouette appears to be overall intact. Left rib fractures are noted there has been removal of the left chest tube. There appears to be a left pleural effusion and probable apical cap noted. The overall appearance of the chest is otherwise similar to the prior study. (St. John Medical Center 0962)

On **September 26, 2016** at 1138, Mr. Buchanan is seen by Dallas Buck, APRN-CNP. He is seen later by Dr. Michael Charles when an addendum is written. They document that he is still on antibiotics including vancomycin and Zosyn for the previous positive blood cultures. The physical examination is improving with Mr. Buchanan being more awake and alert. **His white blood cell count is measured at 21.1, which is nearly double the high normal range.** Dr. Charles noted that the erythema of the right medial elbow is unchanged and has not extended past the previous mark. They document the findings of the right upper extremity CT scan. **However, their clinical concern did not rise to the level of further evaluation with an MRI scan or more importantly a nuclear medicine bone scan.** Their plan is to continue antibiotic therapy, perform a chest x-ray and laboratory studies in the morning, continue with physical therapy and occupational therapy, continue with SCDs for DVT prevention and to discontinue Ativan and avoid the use of benzodiazepines. (St. John Medical Center 0841-0844)

On **September 26, 2016** at 1658, Dr. Rapacki evaluates Mr. Buchanan on Hospital Day #9. He documents a normal neurologic examination. His impression includes 1. **Traumatic prevertebral hematoma cervical ligamentous strain.** 2. Left vertebral artery dissection. He recommends discontinuing the cervical collar, no anticoagulants or NSAIDs, outpatient **neurosurgical follow-up in two weeks with AP and lateral of the cervical spine x-rays**. (St. John Medical Center 0845)

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On **September 27, 2016** at 0737, a portable chest x-ray is performed. It reveals a left pleural effusion and left lower lobe consolidation/atelectasis have not significantly changed. Left-sided rib fractures are again noted. The right line and right costophrenic angle are intact. Heart size is stable. There is mild prominence of the central vasculature without frank pulmonary edema. (St. John Medical Center 0963)

On **September 27, 2016** at 1341, Mr. Buchanan is evaluated by Dr. Michael Charles. Dr. Charles documents that Mr. Buchanan is sitting in the chair eating with no complaints. There is a sitter present but the sitter may no longer be needed. Dr. Charles recommends a CBC with a manual differential, continue with vital signs, remove dressing and have the patient shower. They also recommended that they move Mr. Buchanan closer to the nurse's station and remove the sitter soon. (St. John Medical Center 0846)

On **September 28, 2016** at 1407, Mr. Buchanan is evaluated by Dallas Buck, APRN and Dr. Michael Charles. Mr. Buchanan is walking in the room without difficulty with no acute overnight events and no new complaints. He is ready to go home. He still has an intermittent fever (38.3°C) which is equivalent to 100.94°F. He also continues to have leukocytosis or an **elevated white blood cell count measuring 17.7**, the normal high is 11.0. They document that he has decreasing erythema of the right medial elbow. The diagnoses are listed as the same with the addition of 7. Sepsis-MSSA bacteremia. **The plan is to stop the vancomycin and the Zosyn**, perform a CBC and chest x-ray in the morning, discontinue the sitter and **plan discharge home tomorrow pending the white blood cell count**. (St. John Medical Center 0847-0849)

On **September 29, 2016** at 0744, a portable chest x-ray was performed. The findings reveal the heart size and pulmonary vascularity demonstrate little appreciable change. There is no evidence of pneumothorax. They noted pulmonary opacity in the left mid and lower lung. This may represent atelectasis, pulmonary infiltrate or pulmonary contusion. Left-sided pleural thickening or pleural effusion and left-sided rib fractures are also noted. The right lung appears grossly stable. When compared to the prior study, there is little change noted. (St. John Medical Center 0964)

On **September 29, 2016** at 1056, Mr. Buchanan is evaluated by Dallas Buck, APRN-CNP. He notes that Mr. Buchanan is ambulating the halls without difficulty with no acute overt events and no new complaints. He did okay overnight without a sitter. He was afebrile overnight. He reports that he is ready to go home. **His white blood cell count measured 18.0, which is again elevated from the day before.** Mr. Buchanan is given the same diagnoses with one added, 8. **Leukocytosis-Unknown etiology**. The plan is to perform another CBC in the morning and continue current therapies. The plan is for disposition to home

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when the leukocytosis begins to resolve and or there is no sign of infection. The note was reviewed by the attending Dr. Edwin Yeary. (St. John Medical Center 0850-0852)

On **September 30, 2016** at 1439, a discharge summary was dictated regarding Mr. Buchanan. His date of admission was September 17, 2016 and his date of discharge was September 30, 2016. His discharge diagnoses included Automobile v. Pedestrian, closed pneumothorax and multiple closed fractures of the ribs on the left side. Consultations were obtained by Dr. Rapacki for possible injury of the anterior longitudinal ligament of the cervical spine and a prevertebral hematoma. Procedures included a left chest tube placement for pneumothorax and a second chest tube placement for a pleural effusion.

A brief hospital course was summarized. The discharge condition was listed as "Stable". His discharge activity was listed as "As tolerated". Discharge medications included Lortab 5/325, Advil, Advil PM, multivitamin and propranolol 10 mg.

Mr. Buchanan was given instructions to follow-up with Dallas Buck on October 7, 2016 at 1400, he was to follow-up with the neurosurgeon, Dr. Rapacki, on October 12, 2016 and obtain x-rays of his cervical spine prior to the visit. He was instructed not to go back to work until his follow-up appointment with Dallas Buck. He was to take his medications as prescribed. He was not to drive an automobile unless cleared by a physician. The discharge plan was discussed with Mr. Buchanan and Mr. Buchanan verbalized his understanding and was agreeable to the plan. (St. John Medical Center 0010-0011)

James Buchanan's WBC level while at St. John Medical Center:

Normal Range = 4.3 – 11.0 x 109 cells/liter.

DATE	WBC Value
09/17/2016	11.4 **H**
09/18/2016	18.1 **H**
09/19/2016	10.2
09/20/2016	12.9 **H**
09/21/2016	8.3

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09/22/2016	7.9
09/23/2016	14.4 **H**
09/24/2016	16.0 **H**
09/26/2016	21.1 **H**
09/27/2016	16.2 **H**
09/28/2016	17.7 **H**
09/29/2016	18.0 **H**
09/30/2016	15.2 **H**

St. John Medical Center Bates Number 0042-0044

James Buchanan's Fever Record while at St. John Medical Center:

DATE	Temperature Celsius	Temperature Fahrenheit
Reference Range [35.5-38.3°C]		**Considered a Fever at 100.4°F**
09/17/2016	37.4°C	99.32°F
	37.1°C	98.78°F
	37.6°C	99.68°F
	37.5°C	99.5°F
09/18/2016	37.4°C	99.32°F
	37.0°C	98.6°F
	37.4°C	99.32°F
	37.9°C	100.22°F
09/19/2016	38.1°C	**100.58°F**
	38.0°C	**100.4°F**
	36.9°C	98.4°F
	37.2°C	98.96°F
09/20/2016	37.0°C	98.6°F
	37.0°C	98.6°F

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	37.3°C	99.14°F
	37.0°C	98.6°F
	38.1°C	**100.58°F**
	37.9°C	100.22°F
09/21/2016	37.2°C	98.96°F
	39.8°C	**103.64°F**
	41.8°C	**107.24°F**
	39.5°C	**103.1°F**
	37.8°C	100.04°F
	37.6°C	99.68°F
	37.9°C	100.22°F
	37.6°C	99.68°F
	37.3°C	99.14°F
09/22/2016	37.3°C	99.14°F
	38.3°C	**100.94°F**
	38.7°C	**101.66°F**
	38.1°C	**100.58°F**
	38.0°C	**100.4°F**
	37.2°C	98.96°F
	37.0°C	98.6°F
09/23/2016	37.0°C	98.6°F
	37.4°C	99.32°F
	37.6°C	99.68°F
	38.0°C	**100.4°F**
	37.6°C	99.68°F
	37.9°C	100.22°F
09/24/2016	36.6°C	97.88°F
	37.5°C	99.5°F
	36.6°C	97.88°F
09/25/2016	36.6°C	97.88°F
	37.3°C	99.14°F
	37.2°C	98.96°F
	37.9°C	100.22°F
	38.7°C	**101.66°F**
	36.3°C	97.34°F
09/26/2016	36.7°C	98.06°F
	36.7°C	98.06°F
	36.0°C	96.8°F
	38.3°C	**100.94°F**

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	37.5°C	99.5°F
09/27/2016	37.8°C	100.04°F
	38.3°C	**100.94°F**
	38.3°C	**100.94°F**
09/28/2016	36.1°C	96.98°F
09/29/2016	37.0°C	98.6°F
	37.0°C	98.6°F
	37.1°C	98.78°F
	37.1°C	98.78°F
09/30/2016	37.0°C	98.6°F
	36.5°C	97.7°F
	36.7°C	98.06°F
Discharge Temperature		
09/30/2016	36.9°C	98.42°F

St. John Medical Center Nursing - Bates Number 0240-0596.
St. John Medical Center discharge temperature - Bates Number 0205.

James Buchanan's Antibiotic Therapy at St. John Medical Center:

Antibiotic Therapy was started on 09/22/2016 beginning with Zosyn (pipercillin-tazobactam) and Vancomycin.

Antibiotic therapy continued from 09/22/2016 through 09/28/2016 for a total of 7 days. During that time, Mr. Buchanan received a total of 22 doses of Zosyn and 16 doses of Vancomycin.

All antibiotic therapy was stopped on 09/28/2016.

St. John Medical Center Bates Number 0095-0142

Following discharge from St. John Medical Center, **Mr. Buchanan did not return for the two scheduled follow-up appointments**. He was scheduled to see Dallas Buck on October 7, 2016 at 1400 and he was scheduled to return for evaluation with the neurosurgeon, Dr. Rapacki, on October 12, 2016 and obtain x-rays of his cervical spine prior to the visit.

Exhibit 10

On **October 14, 2016**, two weeks after discharge from the hospital and **after missing his 2 schedule follow-up appointments**, Mr. Buchanan presented to the emergency department at St. John Medical Center. He presented with a chief complaint of neck and bilateral neck pain which he states is following the bicycle accident. He also states he ran out of his pain medication three days ago. He has not been able to find a primary care physician in Muskogee, Oklahoma. Mr. Buchanan presented with neck pain and bilateral paravertebral neck pain related to his accident. He states he did not sustain a neck fracture, but did wear a brace for a few days. He presents with complaints of persistent neck pain. His pain has been constant since the accident, without change. The pain is sharp, constant, severe, and increases with palpation and is without radiation. They describe no focal weakness, paresthesias or fevers. Mr. Buchanan states he has had multiple similar exacerbations since the crash.

On physical examination, he is noted to have a heart rate that is 119 bpm which is high. His neck is supple with no vertebral stepoff or tenderness to palpation. They describe active range of motion without restriction or pain. He has tenderness to palpation in the bilateral neck along the trapezius extending into the upper back, associated with muscle spasm. Palpation of this area reproduces his pain. On musculoskeletal examination, they document that he is ambulatory without difficulty and without a wide-based gait.

Their diagnoses include neck injury, cervical strain and neck pain.

Impression includes trapezius muscle spasm.

They discharged Mr. Buchanan from the emergency department with a prescription for Naprosyn 500 mg twice a day and Robaxin 750 mg one to two tablets, three times a day as needed for muscle spasm.

Mr. Buchanan was advised to follow-up with the surgery team. He was instructed to contact Dallas Buck. Mr. Buchanan should call on Monday for a follow-up appointment. Mr. Buchanan was given handouts from the emergency department and instructed to return to the emergency department if his symptoms return. (St. John Medical Center 1010-1043)

On **October 19, 2016**, Mr. Buchanan presented to the Muskogee Police Department front lobby to discuss the MVC that occurred on September 16, 2016. He was met by Officer Jessicca Yarbrough badge number 541.

Officer Yarborough documented, "On Wednesday, October 19, 2016 at approximately 13:46 hours I, Officer Jessicca Yarbrough #541, was dispatched to the front lobby of the Muskogee Police Dept to make contact with James

Exhibit 10

Buchanan. James stated that he was involved in an accident (2016-33409) which resulted in him being transported to the hospital.

James stated that he wanted to give a statement on 'His Side of the Story'of the accident. James stated that he was riding his bicycle on the shoulder of West Okmulgee, going to the store. James stated that he was struck from behind. James stated that he was 'as far over as he could get' on the road way. My axon camera was activated during this call." (DDR #30, 521)

On **October 21, 2016**, Mr. Buchanan sought further care from Frank Greenhaw, DC who is a chiropractor in Muskogee, Oklahoma. Mr. Buchanan filled out an "Application for Treatment" at Dr. Greenhaw's office and stated he had symptoms in his neck and shoulders. Mr. Buchanan documented that, "I can't do much" and I am not working. **Under the question of who is responsible for his bill, he responded by checking the insurance box and writing in "Attorney".** Mr. Buchanan documents the MVC that occurred on September 16, 2016. In the "Chart Notes" it is documented under objective, that Mr. Buchanan was hit by a car while riding a bicycle on September 16, 2016. He has neck pain and upper back pain. There is nothing that makes his symptoms better. His activities of daily living and movement make his symptoms worse. He describes his pain as intense pain and constant. **He describes left arm symptoms down to the hand and that the left arm is worse. He also has right arm symptoms to the elbow.** His symptoms involve his cervical spine and thoracic spine. They describe that he went to Eastar emergency department and then to St. John's and was admitted for two weeks. Mr. Buchanan then underwent chiropractic treatment which involved electrical stimulation and cold packs. Dr. Greenhaw diagnosed him with symptoms affecting his cervical, thoracic and his lumbar spine. Mr. Buchanan was treated with cold packs and unattended electrical stimulation. The chiropractor also had Mr. Buchanan purchase an ice pack and subzero ointment for his symptoms. (Frank Greenhaw 002-016)

On **October 24, 2016**, Mr. Buchanan returned to Dr. Greenhaw to undergo further treatment. He continued to have symptoms affecting his neck and shoulders and **rated his pain as a 10/10 in both the neck and shoulders**. Dr. Greenhaw treated him with cold packs and unattended electrical stimulation. He had marked chiropractic manipulative treatment of the spine 3-4 regions but crossed out that treatment. Mr. Buchanan did receive manual therapy from the technician. (Frank Greenhaw 008 and 015)

On **October 26, 2016**, Mr. Buchanan followed up with Dr. Greenhaw for further treatment. He listed his neck and shoulders as still problematic and **rated his pain as a 10/10**. Mr. Buchanan was treated with cold packs and unattended electrical stimulation. (Frank Greenhaw 007 and 014)

Exhibit 10

On **October 27, 2016**, Mr. Buchanan underwent an initial evaluation with Kenneth R. Trinidad, D.O.

Dr. Trinidad evaluated him for injuries that occurred in the bicycle/motor vehicle accident on September 16, 2016. He briefly describes his history. Dr. Trinidad notes that he was transferred to St. Francis Hospital in Tulsa, Oklahoma. However, he was actually transferred to St. John Medical Center. He was hospitalized for two weeks and then discharged. He returned home to Muskogee and saw Dr. Frank Greenhaw who has been treating him.

Under present symptoms, Dr. Trinidad documents that Mr. Buchanan complains of **constant pain and spasm in his neck and upper to mid-back with pain and paresthesias into the left arm.** He has moderate to severe headaches associated with the neck injury. **He has pain and stiffness in his left shoulder with crepitus and restricted movement and weakness in the shoulder.**

Dr. Trinidad gives a brief personal history. On physical examination, Mr. Buchanan had left shoulder tenderness over the bicipital groove. There was crepitus in the shoulder with movement. **There is weakness in the muscles of the left shoulder girdle to resistance testing.** Range of motion testing in the left shoulder revealed flexion of 150°, extension 20°, abduction 120°, and adduction 50°. He notes that he is left-hand-dominant.

Examination of the cervical spine revealed **tenderness and spasm from C1 through C7 bilaterally**. Range of motion testing in the cervical spine revealed flexion to be 30°, extension 20°, right lateral bending 20°, left lateral bending 20°, right rotation 30° and left rotation 30°. Examination of the thoracic spine revealed **tenderness and spasm from T1 through T10 bilaterally**. The remainder of the examination was noncontributory.

Dr. Trinidad documents that radiographs will be reviewed at a later date from St. John Medical Center.

Dr. Trinidad's impression includes acute cervical and thoracic spine injury, left shoulder injury, left rib fractures with pneumothorax, posttraumatic headaches resulting from a bicycle/motor vehicle accident of September 16, 2016.

Dr. Trinidad's plan includes Naprosyn 500 mg twice a day, Robaxin 500 mg one half to one tablet 3-4 times daily as a muscle relaxer, Norco 10 mg as needed for pain and Mr. Buchanan should continue treatment with Dr. Greenhaw. Dr. Trinidad wanted to reevaluate Mr. Buchanan's status in two weeks. (Frank Greenhaw 009-010) (River West Medical Clinic 008-009)

Exhibit 10

On **October 31, 2016**, Mr. Buchanan returned for treatment to Dr. Greenhaw. Mr. Buchanan rated his **arm pain as a 10/10**, his **neck pain as a 9/10**, and his **shoulder pain as a 9/10**. Mr. Buchanan underwent therapy involving cold packs and unattended electrical stimulation. He was also provided with more subzero ointment from Dr. Greenhaw.

On the same document, under Doctor's Note they write that Mr. Buchanan's brother called the office and stated that Mr. Buchanan could not return for treatment because he was in jail. This portion of the note was dated, November 4, 2016. (Frank Greenhaw 006 and 013)

On **November 3, 2016** at 1150, Mr. Buchanan was booked into the Muskogee County jail by the Muskogee Sheriff's office.

The medical questionnaire computer form filled out at the time of booking on November 3, 2016 by the Muskogee Sheriff's Office lists multiple questions with a yes or no box to be checked. Under the question, "Do you currently take any medication prescribed by a doctor?" Mr. Buchanan answered yes. The explanation included anti-inflammatory, muscle relaxers, pain meds provided by Dr. Trinidad.

Under the question, "Do you have any other medical problems we should know about?" Mr. Buchanan answered yes and the explanation states broken ribs, collapsed lung, burnt fingers and neck problems.

They document that Mr. Buchanan's brother is Stan Buchanan, and they provide a phone number for Mr. Buchanan's brother. (Turn Key 022-023)

The booking photograph taken of Mr. Buchanan reveals that his head and neck posture is forward flexed with his head laterally flexed and rotated to the left. (Turn Key 009)

On **November 4, 2016**, Mr. Buchanan was evaluated by the staff of Turn Key Health regarding basic medical care while at the Muskogee County jail. They document that he has no allergies and that he has no known drug allergies (NKDA). He did not have any injuries to report due to his arrest or booking. His vital signs were documented with a 97.8°F temperature, 140/86 blood pressure, a pulse of 112, his O2 saturation was 98% and his weight was 145 pounds. Mr. Buchanan's list of medications included an anti-inflammatory, pain medication and a muscle relaxer. This was following the MVC that occurred on September 16, 2016. He listed his doctors as Dr. Trinidad and Dr. Dallas Buck in Tulsa. A note, near the bottom of the first page documents an increased discomfort in movement. Under other comments or physical findings, they documented

Exhibit 10

"Inmate states he has broken ribs, collapsed lung, burnt fingers and neck problems that were due to an MVA from September 16, 2016. (Turn Key 020-021)

On **November 4, 2016** at 1530, a telephone order with read back from Dr. Cooper was obtained for Mr. Buchanan. The order was for naproxen 500 mg (naproxen is the generic name for Naprosyn.) one p.o. b.i.d. x 30 days. (Turn Key 012)

On **November 4, 2016**, the Turn Key staff started a "Medication Administration Record" for Mr. Buchanan. He was administered Naprosyn 500 mg one tablet twice a day. It is documented that he received an evening dose of Naprosyn on November 4, a morning and evening dose on November 5, 6, 7, 8, 9, 10, 11, and 12. He also received Naprosyn 500mg, in the evening on November 13, 2016 and in the morning of November 14, 2016. The Naprosyn was ordered by Dr. Cooper. Each time Mr. Buchanan was given a dose of Naprosyn, it required an encounter with a nurse to dispense the medication. (Turn Key 019 and 012)

On **November 4, 2016**, the medical staff at Muskogee County jail had Mr. Buchanan fill out an "Authorization for Disclosure and Release of Protected Health Information". Under, "Name of Facility or Person to Release PHI (personal health information)", Mr. Buchanan only named Eastar. (Turn Key 017)

On **November 11, 2016**, Mr. Buchanan received a visitor and had a video phone conversation with the visitor, who was his brother, Stan Buchanan. I have reviewed the entire videotape. Mr. Buchanan is able to ambulate to the phone. He has his right arm on one of the inmates who is assisting him while he walks up to the video phone. He then reaches out with his right arm and hand. He then reaches down and grabs the phone and brings it up to his right ear with his right arm and hand. Mr. Buchanan's head and neck are in a forward flexed position. Mr. Buchanan states to his brother that he has "nerve damage in his neck and shoulders". Mr. Buchanan also tells his brother that he cannot move his neck and that he cannot lift his head. Mr. Buchanan tells his brother that he thinks the staff at the jail called Dr. Greenhaw. He also states that they are only giving him one muscle relaxer one time per day. Mr. Buchanan then states, "I can't even use my left arm" and he states, "I'm just about to lose the use of my right hand and my right arm, so I will be a total freaking invalid". Later in the conversation, Mr. Buchanan says "hang on I gotta change hands, I can't hold this arm up no more". It then appears that the other inmate gets the phone and holds it up to Mr. Buchanan's left ear. After the phone call is completed, the other inmate hangs the phone up. Mr. Buchanan then bends down to get on his pad that is right next to where the phone is located. The inmate that is helping Mr. Buchanan then gets the blanket and provides it for Mr. Buchanan on his pad. The inmate helping Mr. Buchanan then rolls away a trashcan that Mr. Buchanan was leaning up against during the phone call. The inmate then walks

Exhibit 10

away and returns approximately two minutes later to turn off the video phone. At this point in time, Mr. Buchanan was on Pod 1.

On **November 11, 2016**, the Muskogee County jail medical visit log notes that Mr. Buchanan was scheduled to see the doctor on November 15, 2016. Nurse Kotas documented this scheduled evaluation with the physician at the Muskogee County jail. He was to be evaluated for complaints of decreased range of motion of the extremities, increase in his pain, and a limited range of motion of his neck. (DDR 30, 515)

On **November 14, 2016** at 1127, there is a medical progress note documented for Mr. Buchanan. The note is dated 11/14/16 with a time of 1127. The note states, "I was called to inmates pod because pt could not walk. When I arrived to pod, inmate was sitting at table with his head down. Inmate complained of worsening pain and inability to move lower extremities. Also c/o of tingling in legs. Notify Dr. Cooper who instructed me to place inmate on provider list for upcoming week. Requested records for recent hospitalization. Will continue to monitor. The note was signed K. McCullar. (Turn Key 018)

On **November 14, 2016** at 1306, the previously filled out "Authorization for Disclosure and Release of Protected Health Information" was faxed from Muskogee County Detention Center to Eastar. Eastar responded by faxing over medical records from September 16, 2016, which was related to the ER visit after Mr. Buchanan was struck by an automobile while riding his bicycle. The medical records from Eastar were of no use to the healthcare providers at the Muskogee County Detention Center. The records from that date are inaccurate and contained a major flaw in the diagnosis of Mr. Buchanan's main problem. (Turn Key 016-017 and 001-008)

The medical records from Mr. Buchanan's two-week hospitalization at St. John Medical Center and his emergency department visit at St. John Medical Center on October 14, 2016, were not disclosed by Mr. Buchanan, requested, or received. However, the medical records from St. John Medical Center were also inaccurate in that they failed to diagnose Mr. Buchanan's main problem. They would not have been beneficial to the staff of MCDC or the medical staff of Turn Key, in caring for Mr. Buchanan.

On **November 14, 2016** at 2010, a telephone order with read back is documented as having been received from Dr. Cooper for Mr. Buchanan. The order states, "Send to ER for eval". The order signed by nurse Kotas. (Turn Key 012)

On **November 14, 2016** at 2010, Mr. Buchanan was evaluated again and a medical progress note was documented. It states, Called to Pod 1 by

Exhibit 10

D.O.(detention officer) Inmate sitting at table head on table. Post MVA 9/16/16-presents with decreased ROM (range of motion) all extremities, decreased ROM to neck. C/O (complained of) 10/10 pain. Elevated heart rate at 116, blood pressure 139/93, O2 saturation fluctuating between 84-90% on R/A (room air). Patient had no control over urinating and had urinated on self and floor. Current medication is Naprosyn 500 mg p.o. b.i.d. Dr. Cooper notified of above and order received to send to ER for evaluation. EMSA arrived and transported to WCH (Wagoner Community Hospital) ED (emergency department) as Eastar is on divert. Signed, R. Kotus. (Turn Key 014)

On **November 14, 2016**, a Medical Transportation Sheet was filled out for Mr. Buchanan. It documented that on November 14, 2016 he was sent to the hospital by EMS to Wagoner ER. They described the illness or injury as, post MVA 09/16/16-decreased range of motion in all extremities, decreased range of motion to neck, increased heart rate of 116, blood pressure 139/93, oxygen saturation 84 to 90% on room air and increased pain. Nurse Kotas also noted that Mr. Buchanan was taking naproxen 500 mg b.i.d. She noted that this was a pre-existing condition and that the inmate was not injured at MCDC (Muskogee County Detention Center). It was signed by Nurse Kotas. (Turn Key 015)

On **November 14, 2016** at 2255, Ms. Kotas noted that Mr. Buchanan had been admitted to Wagoner Community Hospital and was released on OR (own recognizance). (Turn Key 014)

On **November 14, 2016** at 2029, Mr. Buchanan was being attended to by Joshua Ellis, one of the crew members for the Muskogee County EMS. He notes that he was applying a pulse oximeter followed by an ECG monitor. A peripheral IV was started and they departed Muskogee County jail at 2044. They arrived at Wagoner emergency department on November 14, 2016 at 2107. Mr. Buchanan was transported to Wagoner ER without incident. (Muskogee County EMS 019-026)

On **November 14, 2016** at 9:07 PM, Mr. Buchanan was admitted to Wagoner Community Hospital in the emergency department. He was evaluated at 2120. He complained of body pain and weakness, he stated he started pain management before his incarceration and after a bicycle vs. car wreck. Under musculoskeletal evaluation they noted that his left arm was weak.

Medications including Toradol 30 mg IV and Norflex IV were given to Mr. Buchanan at 2133. He then underwent a CT scan which was ordered at 2136. The date and time of the CT report from Wagoner Community Hospital is November 14, 2016 at 2139.

Exhibit 10

The CT scan report dictated by Dr. Anoop Duggal reveals, "There is moderate size anterior wedging of the C5 and C6 vertebrae, with complete loss of the intervertebral disc space height. Destructive bony changes involving the C5 and C6 vertebrae is noted. There is focal posterior kyphotic angulation at C5/C6 level, indenting the adjacent spinal canal and cervical spinal cord. There is significant adjacent prevertebral soft tissue swelling and presence of calcifications in the prevertebral soft tissues. There is probable abscess in these prevertebral soft tissues. Mild degenerative changes are seen at multiple levels in the cervical spine. Bone mineralization is normal. The remainder of the visualized surrounding subcutaneous soft tissue and muscular structures are grossly unremarkable. The visualized lung fields are unremarkable. The findings were discussed with Dr. Hanna Casey, from the ER service at 12:26 PM."

The impression reads, "There is moderate size anterior wedging of the C5 and C6 vertebra, with complete loss of the intravertebral disc space height. Destructive bony changes involving the C5 and C6 vertebrae is noted. There is focal posterior kyphotic angulation at C5/C6 level, indenting the adjacent spinal canal and cervical spinal cord. There is significant adjacent prevertebral soft tissue swelling and presence of calcifications in the prevertebral soft tissues. There is probable abscess in these prevertebral soft tissues. In the absence of any known history of trauma these findings are highly suspicious for infectious etiology causing diskitis and adjacent osteomyelitis. These findings can be further assessed with contrast-enhanced CT/MRI of the cervical spine".

The staff in Wagoner Community Hospital arranged for transfer to Tulsa, Oklahoma. They were subsequently able to obtain a transfer to Hillcrest Medical Center. A certificate of transfer was completed for Mr. Buchanan. They noted that he had a cervical lesion and required neurosurgical consultation. The certificate was signed on November 14, 2016 at 11:35 PM. The final signature on the certificate by the nurse is dated November 15, 2016 at 0020. (Wagoner Community Hospital 003-018)

On **November 15, 2016** at 0034, Wagoner EMS documented the assessment of Mr. Buchanan. He was transported to Hillcrest Medical Center and Mr. Buchanan was offloaded from the ambulance at 0123. They noted that they transferred Mr. Buchanan to the hospital bed and a report was given to the hospital staff. The patient's care was transferred to Hillcrest in stable condition. (Hillcrest Medical Center 0001-0002)

On **November 15, 2016** at 0100, Mr. Buchanan is admitted to Hillcrest Medical Center in Tulsa, Oklahoma. The initial history and physical was dictated by Katie Rogers, CNP. The attending physician is Dr. Soumya Kidiyoor. They noted a chief complaint of, "Progressive generalized weakness." In the history, they document that Mr. Buchanan was transferred to Hillcrest Medical Center from

Exhibit 10

Wagoner Hospital due to progressive weakness over the past two weeks and possible cervical lesion or discitis demonstrated on CT at Wagoner. Mr. Buchanan stated that he lost the ability to move his left arm on 11/04/2016, his right arm, except gross movements on 11/08/2016 and bilateral lower extremities on 11/13/2016. The patient stated that he was incarcerated on 11/03/2016 and was sent from the jail to Wagoner Hospital on 11/14/2016 due to progressive weakness. He was complaining of pain in his neck that he rated as an 8/10 with no radiation. His pain was worse with movement and better with pain medication. **He also relayed that this has been going on for the past 2 months.**

On physical examination, they note that he is unable to move the bilateral lower extremities. She describes his left upper extremity as flaccid but he is able to feel sensation. In the right upper extremity, he is able to provide gross movements but unable to provide fine motor skills.

The CT scan imaging performed at Wagoner was documented. They describe their assessment and plan as 1. Progressive generalized weakness over the past two weeks, possibly secondary to the injuries sustained from an MVA on 09/16/2016. They planned to order Decadron IV and place Mr. Buchanan on continuous pulse oximetry. 2. Kyphotic angulation at C5 through C6 with indenting of adjacent spinal canal and cervical spinal cord demonstrated on CT of the C-spine on 11/14/2016. Consulted and spoke with neurosurgery, Phil Lehr, APRN of Dr. Baird. Ordered a hard cervical collar for immobilization. Ordered an MRI of the C-spine with and without contrast. 3. Suspected osteomyelitis versus abscess versus discitis, demonstrated on CT of the spine on 11/14/2016. Does not have any signs and symptoms of septicemia, we will hold off antibiotics until MRI results and/or surgical plans are known. We will order blood cultures x 2 and urine UA with culture and sensitivity. We will start normal saline at 100 mL an hour x 1 bag. 4. Neck pain, secondary to MVA on 09/16/2016. We will order Norco and continue morphine for pain management. 5. Anemia, unknown etiology. We will order iron, ferritin, TIBC, B12 and folate levels. We will monitor daily CBC and follow-up. 6. Deep vein thrombosis prophylaxis with Lovenox. 7. We will admit as an inpatient due to the need for further imaging of cervical spine, weakness, continuous pulse oximetry. High risk for decompensation. This note was dictated on 11/15/2016 at 1227. (Hillcrest Medical Center 0103-0106)

On **November 15, 2016** at 0129, Mr. Buchanan underwent an MRI scan of the cervical spine with and without IV contrast. The report was dictated by Dr. Jason Martens. He documents under conclusion 1. Severe osteomyelitis and discitis seen at C5-C6 with destruction of the vertebral bodies at this level. There may be an abscess in the disc space here. 2. Posterior extension of the infection and discitis represent either phlegmon or early abscess formation in the anterior epidural space at C5-C6 causing kinking of the cervical cord but no

Exhibit 10

enhancement here. Very minimal signal abnormality is present in the cervical cord. 3. Extension of the abscess and fluid as well as cellulitis in the prevertebral soft tissues at C5-C6 and extending upward to C1 and downward to T1. 4. Neurosurgical consultation is advised. See above for full details. 5. No other significant neural foraminal extension identified elsewhere. (Hillcrest Medical Center 4376-4377)

On **November 16, 2016** at 1115 (36 hours and 15 minutes after admission), a presurgical timeout was performed in the operating room prior to beginning the first surgery for Mr. Buchanan performed by Dr. Baird. The preoperative diagnoses included 1. Quadriplegia. 2. Cervical epidural abscess. The procedure involved 1. C5 and C6 anterior cervical corpectomy. 2. C4-C5, C5-C6 and C6-C7 discectomy. 3. C4 through C7 anterior expandable cage reconstruction of corpectomy site. 4. C4 through C7 anterior cervical plating.

In the narrative portion of the surgery, Dr. Baird noted, "There was a significant amount of phlegmon anterior within the cervical spine. The longus colli muscles were thickened and made the dissection more difficult." Dr. Baird also documents that the motor evoked potentials did improve during the operative intervention.

As noted the surgery was performed on November 16, 2016 at 1115. However, the operative report was not dictated until December 1, 2016 at 1121, approximately two weeks later. (Hillcrest Medical Center 0612 and 0626-0627)

On **November 16, 2016**, two fluoroscopic views of the cervical spine were performed intraoperatively. The report was dictated by Dr. Martens. He reported, the patient has undergone corpectomy/removal of the C5 and C6 vertebral bodies. Surgical screws secure hardware into the C4 and C7 vertebral bodies with a vertebral body spacer/prosthetic device seen across the C5-C6 levels. Soft tissue swelling seen on the prevertebral soft tissues from the cellulitis located here. Endotracheal tube is noted on the films. Surgery was to correct/remove the infected areas in the cervical spine. (Hillcrest Medical Center 4374 and 4375)

On **November 16, 2016**, a single chest x-ray was performed to identify a **left PICC (peripherally inserted central catheter) line placement**. The dictation notes a **left-sided PICC line** tip projects over the right atrium and could be retracted 4-5 cm for more optimal positioning. Minimal atelectasis right lung base. (Hillcrest Medical Center 4373)

On **November 16, 2016**, a repeat chest x-ray was performed for the reposition of the PICC line. The dictation notes that the **right-sided** PICC line has been retracted and the tip now projects over the cavoatrial junction in satisfactory

position. No other change. On the first chest x-ray, Dr. Martens documented that it was a left-sided PICC line and now states that the right-sided PICC line has been retracted. It appears Dr. Martens dictates a second report on November 16, 2016 describing, "Left-Sided PICC line has been retracted. The tip now projects over the mid SVC in satisfactory position. No other change. (Hillcrest Medical Center 4371 and 4372)

On **November 17, 2016**, a CT scan of the cervical spine without contrast was performed. The report was dictated by Dr. Carstens. He notes that, the cervical alignment is satisfactory in this patient status post ACDF (Anterior Cervical Discectomy and Fusion) from C4 through C7, with corpectomy at C5 and C6. The metallic strut graft is well positioned from C4 through C7, with morcellized bone graft material seen within the strut itself. No significant angulation or displacement of the strut graft noted. The posterior elements are intact and well aligned, without facet fracture/dislocation. Some posterior disc space loss and anterior spurring are seen at C7-T1. Additional degenerative endplate changes seen at upper thoracic levels. Moderately severe facet arthropathy is seen bilaterally at all mid cervical levels. Relationships about the skull base and dens are well maintained. (Hillcrest Medical Center 4369-4370)

On **November 23, 2016**, Mr. Buchanan underwent a helical CT scan of the cervical spine without contrast. The report was dictated by Dr. Carstens. He documents that, cervical alignment remains satisfactory in this patient status post ACDF from C4 through C7 with surgical corpectomy at the C5 and C6 levels. Surgical hardware is intact and unchanged in position from prior study. No retraction of cervical plate. The interbody graft remains well positioned at C5-C6 with mineralizing of bone seen within the strut itself. The posterior elements are intact and well aligned without facet fracture/dislocation. Severe facet arthropathy seen at mid-cervical levels. Relationships about the skull base and dens are well maintained. No prevertebral soft tissue swelling seen. Axial imaging confirms the above severe facet hypertrophy and ankylosis seen at mid-cervical levels. (Hillcrest Medical Center 4367-4368)

On **November 26, 2016**, Mr. Buchanan underwent an MRI scan of the cervical spine without contrast. The report was dictated by Dr. Stuart Strickland. He documents that, the patient has undergone interval C5 and C6 corpectomy with placement of metallic strut which is interposed between C4 and C7 vertebral bodies. Also, there is anterior plate and screws extending from C4 through C7. There is a rind of epidural enhancement surrounding the cord at the operative level extending from C4 inferiorly through C6 level. This could represent postoperative granulation tissue but cannot exclude infection. No enhancement of the cord itself is otherwise identified. There is a reversal of the cervical lordosis through the operative level with some dorsal buckling of the

Exhibit 10

cord. No intrinsic signal abnormality of the cord otherwise identified. (Hillcrest Medical Center 4365-4366)

On **November 28, 2016** at 1705, a surgical timeout was completed for the second stage of the operation on Mr. Buchanan's cervical spine. (Hillcrest Medical Center 0603)

On **November 28, 2016**, Mr. Buchanan underwent the second portion of a two stage operation on his cervical spine. The surgery was performed by Dr. Baird. The preoperative diagnoses are listed as, 1. Quadriplegia. 2. Cervical spinal cord compression. 3. Cervical osteomyelitis. 4. Cervical deformity. The surgery performed includes a, 1. Posterior C3 through T2 instrumented cervical fixation and fusion, C3 through C7 posterior cervical decompressive laminectomy. Dr. Baird documented performing pilot holes in T1 and T2 and placing 4.5 mm pedicle screws. Lateral mass screws within placed at C3, C4, C5 and C6. Dr. Baird then performed a laminectomy from C3 to C7. The rods were then contoured and placed bilaterally from C3 to T2. The set screws were placed and tightened to the final torque. Locally harvested bone graft is morcellized and added to cancellus allogenic bone graft and demineralized bone matrix putty for grafting. A drain was placed and the incision was closed.

As noted the surgery was performed on November 28, 2016. However, the operative report was not dictated until January 31, 2017 at 2147, approximately two months later.

The x-rays performed intraoperatively and the x-rays performed during the IME at my office revealed that pedicle screws were inserted bilaterally at C3, C4, C7, T1 and T2. There were no lateral mass screws inserted at C5 or C6. (Hillcrest Medical Center 0622-0623)

On **November 28, 2016**, inter-operative fluoroscopic x-rays were performed with three fluoroscopic spot views. The report reads that, images show an endotracheal tube and a nasogastric tube, as well as, a cervical spine corpectomy device with anterior fusion hardware, which was seen previously on 11/16/2016. Now, there are posterior fusion rods and screws above and below the previously placed anterior hardware. The report was dictated by Dr. Matthew Ford. (Hillcrest Medical Center 4363-4364)

On **December 12, 2016**, Mr. Buchanan was evaluated and treated by inpatient physical therapy. They noted that his muscle strength was good on the right side and diminished on the left side.

Right Grip Strength	4
Left Grip Strength	1
Right Arm Strength	4

Exhibit 10

Right Leg Strength	2
Left Leg Strength	2

Muscle tone was described as:

Right Grip	Normal
Left Grip	Hypotonic
Right Arm	Normal
Left Arm	Hypotonic
Right Leg	Flaccid
Left Leg	flaccid

Mr. Buchanan continued to improve. (Hillcrest Medical Center 1716)

On **December 20, 2016**, Mr. Buchanan continued to be evaluated and treated by inpatient physical therapy. They noted that his muscle strength and muscle tone was improving.

Right Grip Strength	5
Left Grip Strength	4
Right Arm Strength	4
Bilateral Lower Extremities	4

Muscle tone was described as:

All Extremities	Normal

Mr. Buchanan's sensation was noted to be intact in the right upper extremity, left upper extremity and lower extremities. They noted that his gait was unsteady but that he was at "Total" weight-bearing.

Mr. Buchanan showed significant improvement in just eight days. (Hillcrest Medical Center 1954 and 1967-1968)

On **December 23, 2016**, cervical x-rays were performed. The report was dictated by Dr. Carstens. He states, patient is status post ACDF from C4 through C6, with corpectomy at C5 and metallic strut graft in place. Posterior fusion from C3 through C7 is seen. There is some asymmetry of the trans-articular screw placement at C4 but the surgical construct appears grossly intact. Posterior disc space loss and anterolisthesis is seen at both C3-4 and C4-5. No prevertebral soft tissue swelling is seen. (Hillcrest Medical Center 4362)

On **January 8, 2017**, Mr. Buchanan continued to be treated in inpatient physical therapy. They noted the muscle strength, muscle tone and movement.

Exhibit 10

Muscle strength:

Upper Extremities	4
Lower Extremities	3
Bilateral Grip Strength	4

Muscle Tone	Normal in All Extremities

Movement	
Upper Extremities	Asymmetrical, purposeful
Lower Extremities	Purposeful, Limited (Hillcrest Medical Center 2504)

On **January 14, 2017**, Mr. Buchanan continued to be treated on inpatient physical therapy. They again noted his muscle strength.

Muscle Strength:

Lower Extremities	4
Right Grip Strength	4
Left Grip Strength	3
Right Arm Strength	4
Left Arm Strength	3

Movement:

Lower Extremities	Symmetrical, Purposeful
Right Arm	Limited
Left Arm	Limited (Hillcrest Medical Center 2671)

On **January 20, 2017**, the date that Mr. Buchanan was discharged from Hillcrest Medical Center, Mr. Buchanan was evaluated at inpatient physical therapy. They noted his muscle strength, and his muscle tone along with the muscle movement.

Muscle Strength:

Upper Extremities	4
Lower Extremities	3
Right Grip Strength	5
Left Grip Strength	3
Right Arm	5
Left Arm	3

Muscle Tone	Normal in All Extremities

Exhibit 10

Movement:

Upper Extremities	Purposeful, Limited
Lower Extremities	Purposeful, Limited
Right Arm	Full Range of Motion, Purposeful
Left Arm	Purposeful, Limited (Hillcrest Medical Center 2825)

On **January 20, 2017**, a discharge note from Hillcrest Medical Center was dictated by Katie Rodgers, CNP for the attending physician, Ziad Sous, MD.

She notes the admit date to Hillcrest Medical Center as November 15, 2016 and a discharge date as January 20, 2017.

The discharge diagnoses include 1. Quadriplegia with osteomyelitis/discitis of C5 through C6 with epidural abscess at C5 through C6. Status post C5 and C6 anterior cervical corpectomy, C4 through C7 discectomy, cage reconstruction of the corpectomy site and anterior cervical plating performed on November 16, 2016 by Dr. Baird. (She erroneously dictated that the first surgery was performed on November 15, 2016.) Intraoperative cultures were performed which came back positive for methicillin-susceptible Staphylococcus aureus. The patient required 42 days of IV nafcillin per Dr. Bhattarai with the infectious disease service. Mr. Buchanan has completed IV antibiotic treatment. Mr. Buchanan has been working with physical therapy and occupational therapy and is showing improvement. He is being discharged home with home health, physical therapy, and occupational therapy. His condition is listed as stable.

2. Depression, stable. We will discharge the patient home on citalopram and Remeron. Stable.

3. Chronic neck pain, secondary to degenerative joint disease and recent back surgery. We will discharge the patient home on current pain medication regimen. Stable.

4. Anxiety, continue current medication regimen. Stable.

5. Hypertension, controlled. We will discharge the patient home on current blood pressure medication. Stable.

6. Anemia of chronic disease, stable.

7. Disability, requiring long-term antibiotics, long-term physical therapy and occupational therapy. **Mr. Buchanan has had over 32 nursing homes receive an application for placement and all were denied.** Mr. Buchanan will be

Exhibit 10

discharged home with physical therapy and occupational therapy. His discharge condition is considered stable.

On discharge physical examination, under musculoskeletal she notes, "The patient is able to move all extremities, noted weakness to the left upper extremity, only gross movements are noted and the patient is unable to lift arm without assistance." His activity going forward will be as tolerated and as directed by home health. A list of the discharge medications was documented. He is to follow up with his primary care provider in 1-2 weeks. He is to follow up with neurosurgery/neurology as needed. (Hillcrest Medical Center 0088-0091)

On **January 23, 2017**, Mr. Buchanan was first evaluated by Reliant Home Health. Home health was required for Mr. Buchanan **due to limited caregiver support**. He has some difficulty with coordination and poor sensation of the left foot. He also has weakness in the left shoulder and elbow. They noted that Mr. Buchanan has severely decreased strength, balance, and endurance. He has weakness in all four extremities but particularly in the left upper extremity. He has significant coordination problems and difficulty with foot placement during ambulation. They noted that with ambulation he has a tendency to scissor initially and advance his feet too far but he quickly improves after a few steps. They believe he would benefit greatly from PT for improved strength, bouts, and endurance to restore functional independence. (Oxford Healthcare 026-032)

On **January 24, 2017**, physical therapy continued to work with Mr. Buchanan at home. They documented the strength in his upper and lower extremities. His right upper extremity strength is globally is a 3+/5. His left upper extremity about the shoulder is a 1/5 and the strength in the distal left upper extremity is 2+/5. His trunk strength is not documented. Globally, is lower extremity strength bilaterally is listed as a 3+/5 with the distal left lower extremity strength rated as a 3/5.

They were beginning to teach exercises to Mr. Buchanan and noted that he fatigues quickly with activity. However, they state that he is highly motivated and follows instructions well. He has a good understanding of the written home exercise program. He has difficulty with coordination of his lower extremities with his initial steps but improves after a few steps. (Oxford Healthcare 033-036)

On **June 23, 2017**, physical therapy documents in their PT discharge note some improvement in Mr. Buchanan's strength. Every physical therapy note from January 23, 2017 through June 20, 2017, showed strength testing of the upper and lower extremities as either identical to the first visit or eliminated the upper extremity and documented the lower extremity strength as identical to the first physical therapy visit. On the discharge note where they documented strength testing they note right shoulder and distal arm as 3+/5, the left shoulder as a 1/5 and the remainder of the left upper extremity is mostly 3/5. They document the

Exhibit 10

entire right lower extremity strength as a 4-/5 and the left lower extremity between a 3+-4-/5.

In the physical therapy discharge summary, they noted that Mr. Buchanan had met the goals, his condition had improved, he had improved knowledge of self-care management, he had reached his maximum potential, he had improved independence, and Mr. Buchanan had improved functional status. (Oxford Healthcare 436-440)

On **June 26, 2017**, there is a brief skilled nursing visit with LPN supervision. This is the final note with Reliant Home Health. (Oxford Healthcare 441-444)

INDEPENDENT MEDICAL EVALUATION:

On **April 26, 2019**, Mr. Buchanan presented to my office to undergo an Independent Medical Evaluation (IME). My plan was to perform a thorough and complete history and physical examination of Mr. Buchanan to determine the sequence of events as he remembers them and to thoroughly document his current physical condition.

Mr. Buchanan arrived at my office with a videographer from Mr. Buchanan's attorney's office to undergo a Court Ordered Independent Medical Evaluation (IME) at 11:00 AM. Mr. Buchanan had filled out intake paperwork and he underwent x-rays that were completed at 11:30 AM. I entered the room and began the IME at 11:35 AM. I completed the IME and exited the room at 2:06 PM. Several breaks were taken during the IME for Mr. Buchanan, the videographer and I. The length of the videotape that was taken at my office today during this IME should be approximately 3 hours long.

After we completed x-rays, the history of present illness, past medical history, past surgical history, current medications, allergies, social history and employment, the videographer left the room and I did not start the physical examination while he was out of the room in case he needed to reposition his camera. When the videographer reentered the room, he handed me his phone and stated, "Mr. Smolen is on the phone and wants to talk to you." I took the phone and spoke to Mr. Smolen. Mr. Smolen proceeded to tell me that the videographer informed him that I was asking history about when Mr. Buchanan was in jail and when he was in the hospital. Mr. Smolen informed me that I was "not court ordered to obtain that history". He threatened to end the IME immediately and have his client, Mr. Buchanan leave my office. Mr. Smolen was instructing me to end the IME immediately without completing my court ordered IME for Mr. Buchanan. I told Mr. Smolen that if he ended the IME, I would notify Mr. Artus. Mr. Smolen then stated if we have to go back to the Judge to get him to approve Mr. Buchanan coming back to my office to complete the IME, then

Exhibit 10

so be it. Mr. Smolen then stated, "I have been through this 'shit' with you before on the Williams case." Mr. Smolen then asked how much longer it would take to complete the physical examination. I told Mr. Smolen that it would take approximately 20 minutes to perform the examination. He asked me if I would be through within 30 minutes and I told him that I could be finished in 30 minutes. Mr. Smolen then said to go ahead and proceed and finish the IME.

HISTORY OF PRESENT ILLNESS: This history of present illness was relayed to me by Mr. Buchanan during the IME.

Mr. Buchanan is a 57-year-old white male who states that he was involved in a bicycle versus an automobile Motor Vehicle Collision (MVC) that occurred on September 16, 2016. Mr. Buchanan did not remember much immediately following the MVC. He remembers waking up in the back of an ambulance. He was initially taken to Eastar Hospital in Muskogee, Oklahoma. He was treated in the emergency department and underwent several imaging studies. They identified the fractured ribs on the left side in the middle of his chest wall. He also developed a pneumothorax which required placement of a thoracostomy tube in the emergency department in Muskogee. The emergency department in Muskogee then felt that he needed to be transferred to a higher level of care. He was accepted and transferred to St. John Medical Center in Tulsa, Oklahoma and arrived early in the morning on September 17, 2016. He stayed in the hospital at St. John from September 17, 2016 and was discharged home on September 30, 2016. He was given follow-up appointments with one of the trauma nurse practitioners with the last name of Buck. He was also told to follow-up in the emergency department if his symptoms became worse. His hospital course at St. John Medical Center will be discussed more thoroughly in the separate expert opinion report.

After discharge, Mr. Buchanan did not see another doctor for the next two weeks and he subsequently ran out of narcotic pain medication. He returned to the emergency department at St. John Medical Center on October 14, 2016 and was evaluated by the emergency room physicians. There were no imaging studies performed at that emergency department visit and no laboratory studies were performed. The emergency department physician decided to discharge Mr. Buchanan with Naprosyn and a muscle relaxer. Mr. Buchanan stated that the Naprosyn was not very beneficial in controlling his continued pain after discharge from St. John Medical Center, following his previous hospitalization.

Mr. Buchanan was subsequently seen by Dr. Kenneth Trinidad on October 27, 2016 for what appears to be an initial evaluation and the only evaluation performed by Dr. Trinidad. Dr. Trinidad performed a history and physical examination. Dr. Trinidad documented that Mr. Buchanan is a 54-year-old male who gives a history of injuries that occurred in a bicycle/motor vehicle accident

Exhibit 10

on or about September 16, 2016. Mr. Buchanan was hit from behind and was knocked to the ground. He states he lost consciousness at the scene. He injured his neck, upper back, left chest and left shoulder. He was taken by ambulance to Eastar Medical Center. X-rays and CT scans were obtained. Dr. Trinidad also notes that he was hospitalized for two weeks and he had left rib fractures with a pneumothorax and a chest tube was placed. He also had neck and back injuries. He noted that Mr. Buchanan complains of constant pain and spasm in his neck and upper to mid-back with pain and paresthesias into his left arm. He has moderate to severe headaches associated with the neck injury. He has pain and stiffness in his left shoulder with crepitus and restricted movement and weakness in the left shoulder.

On physical examination, Dr. Trinidad noted tenderness and spasm in the cervical spine extending from C1 through C7 bilaterally. Physical examination of the left shoulder revealed tenderness in the joint line and over the bicipital groove.

Dr. Trinidad gave him diagnoses including, acute cervical and thoracic spine injury, left shoulder injury, left rib fractures with pneumothorax, posttraumatic headaches resulting from a bicycle/motor vehicle accident of September 16, 2016. He recommended Naprosyn 500 mg twice a day, Robaxin 500 mg one half to one tablet 3 to 4 times daily, Norco 10 mg as needed for pain, he was to continue the modality and chiropractic treatment with Dr. Greenhaw and he should follow-up for reevaluation with Dr. Trinidad in two weeks.

Mr. Buchanan stated that, from October 27, 2016 to November 3, 2016, he continued to see his chiropractor, Dr. Greenhaw another 4-5 times. Dr. Greenhaw performed electrical stimulation, cold packs, massage therapy and did not perform chiropractic manipulation.

Mr. Buchanan then gives a history of being incarcerated beginning on November 3, 2016. He stated that while he was incarcerated, they gave him one Naprosyn per day for his pain. He stated that he would stand in line for up to 30 minutes just to get the Naprosyn pill.

Mr. Buchanan states that he was booked into the Muskogee County jail on November 3, 2016. He told the jail employees at the time that he had pain all over his body. **He had pain in his neck from day one of his incarceration and Mr. Buchanan states that he was already developing upper extremity weakness and lower extremity weakness prior to the date of his incarceration.**

Mr. Buchanan stated that he had run out of pain medication completely prior to being incarcerated. He told me the history leading to his incarceration. He stated that he had a bond that apparently had been revoked. There was a

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woman named Cassandra with Points Bail Bonds who contacted Mr. Buchanan and told him that he needed to turn himself in to the Muskogee County jail. Cassandra with Points Bail Bonds picked Mr. Buchanan up at his residence and drove him to the Muskogee County jail so he could surrender.

Mr. Buchanan stated that during the booking process he told the officers that he had medical issues. **While he was in the booking area, he was having a hard time taking his clothes off and donning the orange jumpsuit.** He states that one of the other inmates helped him to get the jumpsuit on. He states he was kept in a holding cell for approximally 24 hours. He thought that he would see the Judge and that he would get a public defender. However, when he did get in front of the Judge, Mr. Buchanan states that the Judge told him he would see him in 14 days, at which time, he would assign a public defender to Mr. Buchanan's case.

Mr. Buchanan states that prior to the bicycle versus automobile MVC that occurred on September 16, 2016, he had been working through a temp agency at CDS which is a subsidiary of Whitlock which is a juice plant. He drove a forklift and performed manual labor. It was during that period of time prior to the MVC that he had income and was paying for his own bond and for his own personal attorney. Following the MVC, he no longer had any money to pay his attorney and the attorney dropped him as a client. Mr. Buchanan states that, once he got out of the hospital, his bond was revoked which led to his incarceration.

Mr. Buchanan stated that he could see the nurse daily. However, he stated he would be lucky to see the nurse once per day. He was also seeing one of the nurses or other healthcare professionals when he received his Naprosyn. Mr. Buchanan states that he never saw a physician and he was not sure if he was ever scheduled to be seen by the doctor. He does state that he remembers seeing at least two different nurses.

Mr. Buchanan says as he was having problems with his arms and difficulty walking that he was assisted by some of the inmates. He stated that he had a video conference call with his brother. There is a video system at the jail where you can talk to a visitor on a phone and see them over a video screen. The video conference call with Mr. Buchanan's brother occurred on November 11, 2016. Mr. Buchanan states that one of the inmates helped him hold the phone to his ear since he could not use either arm to hold the phone. He said the phone call lasted for about 10 minutes. Mr. Buchanan also stated that the inmate assisting him also propped him up during the phone call. The inmate who was helping Mr. Buchanan stayed with him through the entire phone call with his brother.

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Mr. Buchanan also stated that he had been sleeping on a pad that was out in the main area on the floor. He had two blankets, one used for a pillow and the other he put over him for warmth. He stated that his sleeping pad was just below the phone where he took the phone call from his brother.

Mr. Buchanan goes on to describe the conditions stating, they would bring his food and set it on the floor by his pad and he was having difficulty feeding himself so some of the other inmates would help him over to the table and they would spoon feed him. Mr. Buchanan states that the other inmates, helping to feed him, started about the time of the phone call with his brother which was November 11, 2016. He also stated that some of the inmates were coming up and taking food off his tray.

Mr. Buchanan stated that, he realized if they declared an emergency that they would send him to the hospital. In order to initiate a declared emergency, Mr. Buchanan states that he intentionally urinated all over himself. The other inmates in his pod area called the jail officers and they came and looked at Mr. Buchanan. Mr. Buchanan states that the officer told him to get up and he said that he could not get up. The female officer said she looked at the videotape of the past 24 hours of the inmates "dragging him around the pod" they looked him over and scheduled an EMSA transfer to the hospital. He states that they stripped him down from his wet clothing, dried him off and placed him in a dry jumpsuit. The officers cuffed his ankle to the stretcher and brought his belongings from the jail with them to the hospital. The officers followed EMSA and Mr. Buchanan to the Wagoner Hospital and brought his belongings to him.

The Wagoner emergency room personnel performed the CT scan and the doctor told Mr. Buchanan that he had an infection in his neck and they were transferring him to Hillcrest Medical Center in Tulsa, Oklahoma.

Mr. Buchanan stated that the Sheriff's officer warned him not to miss another court date. They took the cuffs and jumpsuit off of Mr. Buchanan and Mr. Buchanan was dressed in a hospital gown and his belongings were sent with him to Hillcrest Medical Center.

Mr. Buchanan recalls arriving at Hillcrest Medical Center in the early morning. He was seen and evaluated by the emergency room physician and subsequently admitted to the hospital. He thinks it was the next day before he actually saw the neurosurgeon, Dr. Baird. Mr. Buchanan states that Dr. Baird told him that he had a "broken neck". He thinks Dr. Baird came back a few days later and explained the surgery, which would involve going in the front of his neck followed by a second portion where they go into the back of his neck.

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According to Mr. Buchanan, Dr. Baird told him that he needs to get a civil rights attorney for a civil rights claim. Mr. Buchanan stated that Dr. Baird told him that his outcome from jail could have been a lot worse, and that he could have possibly been paralyzed for life. He does not remember if Dr. Baird told him about any complications that might be anticipated from the planned surgery.

Mr. Buchanan did not remember having a cervical collar placed during the EMS transport from Wagoner to Hillcrest Medical Center. He also did not remember having a collar on his neck until after his surgery was completed.

Mr. Buchanan thinks that he remembers his surgery having been performed 3-4 days after he was admitted to Hillcrest Medical Center. He stated that after the anterior surgery and after the subsequent posterior surgery on his cervical spine, he did not notice much difference or change in his strength immediately following the operations. He states that the surgery went well.

I asked Mr. Buchanan about rehabilitation and his recovery. He states that he was kept at Hillcrest Medical Center for 71 days and during that time underwent occupational therapy and physical therapy. He did state that one time he tried to get up on his own and he fell out of bed onto the floor. He noted that the medical personnel were not very happy about that incident. They apparently obtained a bed that was much closer to the floor that Mr. Buchanan could not fall out of, since it was so low to the floor.

Mr. Buchanan said that there were some issues at Hillcrest Medical Center with the length of his stay and that the social workers were attempting to obtain some sort of coverage so he could be transferred out to another facility or be discharged home with home health care. Mr. Buchanan states that his attorney became involved with getting him home health care through a company called Reliance Home Health. They were apparently willing to do the home health for Mr. Buchanan awaiting a settlement regarding this lawsuit. Mr. Buchanan stated that at one point, Reliance Home Health changed ownership and refused to continue providing service awaiting payment following the completion of this lawsuit.

Mr. Buchanan's attorney was able to get home physical therapy for one hour per day, seven days per week. Mr. Buchanan's brother also helped while he was at home. They obtained Meals on Wheels to bring food to Mr. Buchanan. This allowed Hillcrest Medical Center to discharge Mr. Buchanan home to a safe environment.

Mr. Buchanan states that he subsequently obtained Medicaid and was able to access Sooner Ride to take him to and from outpatient healthcare provider visits. Mr. Buchanan did not have a primary care physician but he was able to

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find a cardiologist that would take Medicaid and would treat him. The cardiologist took over prescribing his pain medications. Subsequently, Mr. Buchanan had his pain management transferred to Advance Pain Management of Tulsa under the primary care of Dr. Kenneth Reed. Mr. Buchanan states that he also has a primary care physician, Dr. Shelley Carlton.

Today during this IME, I asked Mr. Buchanan specifically about his complaints related to the claims in this lawsuit. He gave me a list of symptoms including:

1. He has pain and swelling in both his lower extremities from his knees down.
2. Left upper extremity nerve pain and radiculopathy with a peripheral neuropathy.
3. Right upper extremity radiating symptoms in the forearm to the wrist and peripheral neuropathy.
4. Pain and stiffness in his neck.
5. Lumbar back pain.
6. Chronic headaches.

Based on the physical complaints described by Mr. Buchanan, I asked him to rate his pain over the last two months on a Visual Analog Scale (VAS) of 0-10, with 0 being no pain and 10 being the worst pain you have ever experienced.

AREA OF PAIN:	**WORST PAIN:**	**LEAST PAIN:**
Bilateral LE Pain	8/10	5-6/10
Left UE Nerve Pain	8/10	7/10
Right UE Nerve Pain	6/10	3/10
Neck Pain and Stiffness	8/10	6/10
Lumbar Back Pain	5/10	2-3/10
Chronic Headaches	7/10	3/10

I asked Mr. Buchanan to describe the things that make the above outlined symptoms **worse or better**. He was able to give me a list for each complaint regarding this claim. Those are outlined below:

AREA OF PAIN:	**MAKES IT WORSE:**	**MAKES IT BETTER:**

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Bilateral LE Pain	Movement	Pain Medication
Left UE Nerve Pain	Nothing Specific	Exercise/Not Moving UE
Right UE Nerve Pain	Nothing Specific	Hot Shower
Neck Pain and Stiffness	Nothing Specific	Hot Shower
Lumbar Back Pain	Nothing Specific	Hot Shower
Chronic Headaches	Nothing Specific	Hot Shower/Pain Medication

PAST MEDICAL HISTORY: Hypertension, chronic pain and constipation from narcotic pain medication.

PAST SURGICAL HISTORY: Right lower extremity tibia and fibula fracture treated closed, left wrist fracture treated closed, motorcycle crash where he sustained a left lower extremity femur fracture, tibia and fibula fracture, a right wrist fracture, and a small fracture off the right shoulder. The femur fracture was treated in traction. Fractured sternum treated closed. Left rib fractures with a pneumothorax from the bicycle versus automobile MVC. Anterior and posterior cervical fusion.

CURRENT MEDICATIONS: oxycodone/APAP 10/325 mg 4 pills per day, gabapentin 600 mg daily, ibuprofen 800 mg twice daily, amlodipine 5 mg one per day for hypertension, Lubiprostone 24 µg for constipation.

ALLERGIES: **No Known Drug Allergies** **No History of Latex Allergy**

SOCIAL HISTORY: Mr. Buchanan is single and does not have any children. He currently lives alone and does not have many stairs to negotiate. Mr. Buchanan does not smoke cigarettes or use tobacco products. He drinks approximately two drinks per day or about 1 pint of alcohol per week. He likes drinking rum and wine. Mr. Buchanan tries to walk his dog daily and periodically he rides his bike.

EMPLOYMENT: Prior to the bicycle versus automobile MVC that occurred on September 16, 2016, Mr. Buchanan was employed through a temp agency at CDS which is a subsidiary of Whitlock. They have a juice plant where he worked

Exhibit 10

running a forklift and performing manual labor. He states that he has not worked since the MVC.

REVIEW OF SYSTEMS:
HEENT: Noncontributory.
CARDIOVASCULAR: Mr. Buchanan has hypertension.
GASTROINTESTINAL: Mr. Buchanan has constipation from narcotic pain medication.
PULMONARY: Mr. Buchanan had a history of rib fractures and a pneumothorax.
GENITOURINARY: Mr. Buchanan documents that he was numb below the waist for a time after surgery.
CENTRAL NERVOUS SYSTEM: Mr. Buchanan had vertebral osteomyelitis and a cervical spinal epidural abscess producing cervical cord compression that required anterior and posterior spine reconstruction and fusion.
MUSCULOSKELETAL: Mr. Buchanan has had multiple orthopedic injuries in his life including a right lower extremity tibia and fibula fracture, left wrist fracture, left lower extremity femur fracture, left lower extremity tibia and fibula fracture, right wrist fracture, right shoulder fracture, a fracture of the sternum, rib fractures on the left side, and anterior and posterior cervical spine reconstruction and fusion for vertebral osteomyelitis with vertebral body collapse, spinal epidural abscess and spinal cord compression with partial, temporary paralysis.

PHYSICAL EXAMINATION: On physical examination, Mr. Buchanan is a relatively healthy-appearing, well-nourished white male who throughout the 2½ hour IME appears to be comfortable sitting in the chair. He stands up after approximately one hour and moves around due to some developing stiffness. He performs a squatting type maneuver while he is up moving around. Mr. Buchanan is comfortable moving around the room and shows no signs of pain or limitations. He can stand and ambulate with a normal, narrow-based, nonmyelopathic gait. He can toe and heel walk with good strength in his lower extremities. Range of motion of his lumbar spine is full and painless. He is nearly able to touch the floor with forward flexion. There is no pain on palpation over his thoracic or lumbosacral spine. When describing the pain in his low back, Mr. Buchanan states that the pain is deeper inside and cannot be touched from the surface. There are no lumbar or thoracic paraspinal muscle spasms identified on palpation and no pain or tenderness to palpation. He complains of no pain over the sciatic notch regions or over the greater trochanteric bursa bilaterally. The range of motion of the joints in his lower extremities is well maintained and non-painful. Mr. Buchanan has pitting edema in his lower extremities bilaterally. I suggested that he discuss the edema in his legs with his primary care physician. He has multiple scrapes over his lower extremities and over his right elbow. He explains to me later in the IME that when he walks his dog, he sometimes trips over the leash which causes him to fall and scrape up the skin on his legs and arms.

Exhibit 10

Range of motion of Mr. Buchanan's cervical spine is decreased secondary to the large cervical spine reconstruction and fusion that was performed. He is noted to have decreased range of motion in all planes. He has 40° of flexion, 20° of extension, 5° of right lateral bending, 5° of left lateral bending, 45° of right rotation and 45° of left head rotation. Palpation of the cervical spine reveals mild mid-paraspinal muscle pain with no obvious cervical paraspinal muscle spasm. He has some pain that extends over the right trapezius and over the right anterior shoulder joint line consistent with pain intrinsic to the right shoulder joint. There is no pain noted over the left trapezius, left shoulder musculature or parascapular musculature. Range of motion of the joints in Mr. Buchanan's upper extremities is full and non-painful. At one point while sitting down during the IME, Mr. Buchanan was demonstrating some of his upper extremity strengthening exercises that he performs with weights in his hands. He was able to move all of the joints in his upper extremities through a wide arc of motion with no pain.

NEUROLOGICAL EXAMINATION: Neurologic examination of Mr. Buchanan's lower extremities reveals, 5/5 muscle strength in all lower extremity muscle groups. Sensation is slightly decreased in the left lower extremity when compared to the right. The slight decreased to pinwheel sensation in the left lower extremity appears to be related to the left L4 and L5 nerve root distribution. Vibration sense is well preserved in both lower extremities. Straight-leg raising test is negative bilaterally. Deep tendon reflexes are 2+ and symmetric at the knee jerk bilaterally and 1+ and symmetric at the ankle jerk bilaterally. Babinski test reveals hypersensitivity to the bottom of Mr. Buchanan's feet bilaterally. However, the toes are noted to be downgoing during the Babinski test. While testing hamstring motor strength on the left side, Mr. Buchanan experienced what appeared to be neural tension sign in the left common peroneal nerve.

Neurologic examination of Mr. Buchanan's upper extremities revealed, 5/5 muscle strength in all upper extremity muscle groups on the right and, 4/5 muscle strength in all upper extremity muscle groups on the left. There was a definite difference in strength in his left upper extremity when compared to the right. The left grip strength was also 4/5 when compared to the right. There was noted to be some atrophy of the intrinsic muscles in his hands bilaterally. Sensation to pinwheel is within normal limits in the right upper extremities in all dermatomes and Mr. Buchanan had some hypersensitivity in several dermatomes in the left upper extremity. Vibration sense is preserved in both upper extremities. Deep tendon reflexes are 2+ and symmetric at the biceps bilaterally and, 1+ and symmetric at the triceps and brachioradialis bilaterally. Hoffman test was positive bilaterally.

Exhibit 10

X-RAYS: X-Rays taken today in clinic include an AP and lateral x-ray of the cervical spine and a PA and lateral complete spine standing radiograph scoliosis views.

The cervical x-rays show some flattening of the normal cervical lordosis, but there is an overall good coronal and sagittal alignment of the cervical spine. There is a large cage anteriorly spanning from the inferior endplate of C4 to the superior endplate of C7. There is an anterior cervical plate with two screws into the C4 vertebral body and two screws into the C7 vertebral body. There is posterior lateral mass and pedicle screw instrumentation in place extending from C3 to T2. There are posterior screws located at C3, C4, C7, T1 and T2 bilaterally, with connecting rods from C3 down to T2 and a single cross-link connector. The construct appears to be stable with no implant loosening and Mr. Buchanan appears to have a solid fusion that has developed anteriorly from C4 to C7 and posteriorly from C3 possibly down to T2.

The lateral complete spine standing scoliosis view shows the cervical instrumentation in the lateral projection. In the thoracic spine, Mr. Buchanan has multilevel degenerative disc changes with marginal osteophytes forming off the anterior aspect of the vertebral body endplates at multiple levels. The lateral x-ray of the lumbar spine reveals degenerative disc disease at the L2-L3, L3-L4, L4-L5 and the L5-S1 levels with decreased disc space height and nitrogen replacing the disc material at the L5-S1 level. There are marginal degenerative osteophytes forming along the anterior vertebral endplates at all four disc levels consistent with long-standing degeneration of the lumbar spine.
The PA radiograph of the entire spine standing reveals that Mr. Buchanan has a right-sided lumbar scoliosis that measures 14° from the top of T11 to the bottom of L4 with the apex at the L1-L2 disc. There is collapse of the L4-L5 disc space with more collapse on the right side than left side contributing to the lumbar scoliosis. The right-sided lumbar scoliosis appears to be an adolescent idiopathic scoliosis with superimposed degenerative changes. Mr. Buchanan also has two compensatory curves in the thoracic spine including a 10° right-sided upper thoracic curve from the top of T4 to the bottom of T8. There is also a left compensatory lower thoracic curve that measures 10° from the bottom of T8 to the top of T11. Otherwise, the overall coronal and sagittal alignment of Mr. Buchanan's entire spine standing is well maintained.

EXPERT MEDICAL OPINIONS:

My expert medical opinions are provided as a board certified orthopedic surgeon with fellowship specialty training in spine surgery and over 21 years of active medical practice. My expert medical opinion is also provided within a reasonable degree of medical probability.

Exhibit 10

Mr. James Buchanan was involved in a bicycle vs. automobile MVC on September 16, 2016. Mr. Buchanan sustained fractures to the left fourth, fifth, sixth and seventh ribs. He also developed a left-sided pneumothorax associated with the left chest wall rib fractures. Mr. Buchanan also had scrapes and soft tissue injuries to the left side of his face, his upper extremities and lower extremities.

Mr. Buchanan was admitted to the emergency department at Eastar in Muskogee, Oklahoma. A chest tube was placed on the left side for the left pneumothorax.

Multiple imaging studies were performed while he was at Eastar, including x-rays of the right hand and wrist along with two separate chest x-rays. Mr. Buchanan also underwent a CT scan of the head and a CT scan of the abdomen and pelvis. Neither study revealed any acute pathology. Mr. Buchanan also underwent a CT scan of the chest with IV contrast and a CT scan of the cervical spine without IV contrast.

The CT scan of the chest with IV contrast was performed and the report was dictated by Dr. John Crouch. Dr. Crouch's impression included 1. There are acute appearing fractures involving the left fourth, fifth, sixth, seventh ribs, at their lateral aspects. 2. There is a moderate left anterior pneumothorax extending from the left apex to the left base occupying less than 30% of the volume of the left hemithorax and with no specific signs of tension pneumothorax. **3. The prevertebral or retropharyngeal hemorrhage seen in the neck extends into the posterior mediastinum with this portion of the hematoma within the posterior mediastinum measuring approximately 4.2 x 5.4 x 9.0 cm. No IV contrast extravasation/active arterial bleeding within the hematoma.** (St. Francis Muskogee 061-062)

The CT scan of the cervical spine without IV contrast was performed and the report was dictated by Dr. John Crouch. Dr. Crouch noted in his findings that there was **no acute cervical spine fracture**. There is multilevel disc height loss, endplate degenerative spurring and uncinate process and facet hypertrophy. There is **diffuse osteopenia**. There is a grade 1 anterolisthesis of C3-4 and C4-5, possibly degenerative although posttraumatic cannot be excluded. Discs/spinal canal/neural foramina reveal that there is multilevel neural foraminal stenosis. The soft tissues were unremarkable. **In the retropharyngeal space there is bruising/hematoma lateral left base of the neck and left supraclavicular region and additional large discrete hematoma in the prevertebral or retropharyngeal region extending along the length of the neck from C1-T1 and likely extending into the mediastinum. The maximum size of the prevertebral hematoma is approximately 9.4 x 2.4 x 14.4 cm. Possibly related to**

Exhibit 10

injury of the anterior longitudinal ligament of the cervical spine. His impression includes **1. There is bruising/hematoma lateral left base of the neck and left supraclavicular region and additional large discrete hematoma in the prevertebral or retropharyngeal region extending along the length of the neck from C1-T1 and likely extending into the mediastinum. The maximum size of the prevertebral hematoma is approximately 9.4 x 2.4 x 14.4 cm. Possibly related to injury of the anterior longitudinal ligament of the cervical spine. 2. No acute cervical spine fracture.** (St. Francis Muskogee 065)

Unfortunately for Mr. Buchanan, this begins the dissemination of inaccurate medical diagnostic information related to his cervical spine. Mr. Buchanan did not sustain a fracture, a ligamentous disruption, or any other significant injury to the cervical spine that would produce a hematoma of the magnitude identified on CT scan at Eastar. Mr. Buchanan's medical picture would become clearer, after he was transferred to St. John Medical Center in Tulsa, Oklahoma.

Eastar appropriately treated Mr. Buchanan's left rib fractures and left pneumothorax with placement of a chest tube. They subsequently transfered Mr. Buchanan to St. John Medical Center in Tulsa, so that Mr. Buchanan could obtain an increased level of care. St. John Medical Center is a Level II Trauma Center.

At St. John Medical Center, the medical staff continued to repeat the same information dictated in the CT scan report produced at Eastar, and never repeated their own CT scan of the cervical spine to further assess the bone structure.

On **September 17, 2016** at 0747, the surgical resident Dr. Jacob Landry dictated the initial ICU note, and documented, **1. There is bruising/hematoma lateral left base of the neck and left supraclavicular region and additional large discrete hematoma in the prevertebral or retropharyngeal region extending along the length of the neck from C1-T1 and likely extending into the mediastinum. The maximum size of the prevertebral hematoma is approximately 9.4 x 2.4 x 14.4 cm. Possibly related to injury of the anterior longitudinal ligament of the cervical spine.** (This is an exact duplication of the report by the radiologist at Eastar for the cervical spine CT that the radiologist listed under 1. in his report.)

On **September 17, 2016** at 1157, Dr. Thomas Rapacki performed a neurosurgery consultation for Mr. Buchanan. Dr. Rapacki gives a brief history of Mr. Buchanan's injury. Mr. Buchanan reports left dorsal neck pain, midline upper back pain and odynophagia or painful swallowing. He also reports a burning sensation radiating distally in his right upper extremity into his index finger. Dr. Rapacki also noted that Mr. Buchanan had dysphonia or difficulty vocalizing.

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It was at this point that Mr. Buchanan began to manifest some of his neurologic symptoms described by Dr. Rapacki as, neck and upper back pain and **electrical pain radiating through the right upper extremity to the index finger**.

Dr. Rapacki in his plan states that he wants to **obtain magnetic resonance imaging of the cervical and thoracic spine to screen for soft tissue injury to explain the prevertebral hematoma.**

Dr. Rapacki did obtain a magnetic resonance imaging scan of the cervical and thoracic spine. The radiologist documented his findings of the cervical MRI scan and they included, suspect a subtle **dorsal epidural hematoma at C4-5 to C5-6 that is 0.2 cm or 2 mm in thickness**. **Paravertebral soft tissues reveal significant soft tissue edema predominately in the prevertebral space also noted in the dorsal lateral paraspinal musculature.**

The radiologist's impression includes 1. Compromise flow of the left vertebral artery. **2. Significant soft tissue swelling of the neck without obvious fracture.** 3. Artifact versus strain of the anterior longitudinal ligament at C1-C2. **4. Very subtle 2 mm thick mid cervical dorsal epidural hematoma without significant resultant mass effect/stenosis. No spinal cord edema**. 5. Otherwise, as detailed above. **Impression #1 was briefly discussed with Dr. Rapacki via telephone on 9/17/2016 3:02 PM.** (St. John Medical Center 0941-0942)

It was at this point that Mr. Buchanan's workup and care diverged from obtaining the actual diagnosis.

On **September 18, 2016**, Dr. Rapacki's impression includes 1. **Traumatic prevertebral hematoma.** 2. Suspected left vertebral artery dissection v. occlusion of unclear chronicity.

All the medical personnel were convinced that the "huge" fluid collection in the prevertebral or retropharyngeal space, was in fact a traumatic hematoma. However, there was no fracture of the cervical spine, ligamentous disruption or significant tissue damage that would account for such a large hematoma forming in the prevertebral space. Dr. Rapacki even stated that, he wanted to screen for soft tissue injury to explain the prevertebral hematoma. That was never done. Instead the physicians became focused on the occlusion of the left vertebral artery.

Mr. Buchanan then underwent a repeat cervical MRI scan on September 18, 2016, that revealed no fracture, no significant ligamentous injury, and no significant soft tissue injury that would account for the prevertebral "hematoma" or for the epidural "hematoma".

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On **September 18, 2016** at 1646, Mr. Buchanan underwent an MRI scan of the thoracic spine without contrast. The impression revealed, "**Paraspinous edema extending into the upper thoracic spine without evidence of fracture, subluxation, or acute ligamentous injury.** Minimal rightward curvature of the upper thoracic spine. Bilateral atelectasis versus trace effusions." (St. John Medical Center 0947)

On **September 19, 2016**, Dr. Rapacki documents his impression as 1. **Traumatic prevertebral hematoma cervical ligamentous strain.** 2. Left vertebral artery dissection. 3. Sedated for EtOH withdrawal.

The MRI scan of the thoracic spine documents **paraspinus edema extending into the upper thoracic spine without evidence of fracture, subluxation, or acute ligamentous injury.**

Examining Mr. Buchanan's clinical picture retrospectively, reveals that the prevertebral or retropharyngeal "hematoma" and the small epidural "hematoma" were not related to a hematoma collection. Mr. Buchanan had no structural injury to his cervical spine that would account for a huge hematoma in the prevertebral space and no injury that would account for a small epidural hematoma.

Mr. Buchanan's clinical picture becomes more clear when you consider the fluid collections identified on CT scan and MRI scan along with Mr. Buchanan's vital signs and laboratory studies. Mr. Buchanan presented to St. John Medical Center with an elevated white blood cell count and subsequently developed a significantly increasing white blood cell count. His white blood cell count at one point was elevated to 21.1, which is nearly double the high end of the normal range. The chart above documents Mr. Buchanan's white blood cell count while he was at St. John Medical Center. On the day Mr. Buchanan was discharged from St. John Medical Center he had a white blood cell count that was still elevated, measuring 15.2.

Mr. Buchanan also began to spike temperatures. On September 21, 2016, Mr. Buchanan had three sequential temperature readings measured at 39.8°C or **103.64°F**, 41.8°C or **107.24°F**, and 39.5°C or **103.1°F**. Mr. Buchanan continued to run a low-grade fever on and off throughout his admission at St. John Medical Center.

The physicians did become concerned about his elevated white blood cell count and his fever. On September 22, 2016, they began antibiotic treatment with vancomycin and Zosyn. They continue the antibiotic treatment for a total of seven days, until Mr. Buchanan was discharged on September 30, 2016.

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The physicians were obviously concerned about the possibility of an infection. Mr. Buchanan had cellulitis over the right elbow and he underwent a CT scan with contrast of the right upper extremity to "rule out osteomyelitis". The physicians appeared to be concerned that he may have a source of infection somewhere in his body, and they would be correct.

The huge hematoma in the prevertebral space was in fact an abscess filled with purulent fluid that had been collecting prior to the MVC in which Mr. Buchanan was involved, that occurred on September 16, 2016. I estimate, based on the size of the prevertebral abscess, the migration of the abscess into the epidural space, and the changes to the bone that can be seen on the CT scan performed at Eastar that, Mr. Buchanan began developing this infection several weeks prior to the September 16, 2016 MVC.

Spinal infections such as the one Mr. Buchanan had, along with spinal epidural abscesses, are very rare and represent approximately 1 to 2 patients out of every 10,000 hospital admissions.

The physicians at Eastar and the physicians at St. John Medical Center were following the typical pattern for the diagnosis of spinal epidural abscess.

A delay in the diagnosis of a spinal epidural abscess is the RULE not the EXCEPTION. Approximately 70% to 75% of patients diagnosed with spinal epidural abscess are diagnosed after the onset of neurologic symptoms.

Mr. Buchanan was subsequently discharged from St. John Medical Center on September 30, 2016. He was given instructions to follow-up with Dallas Buck, APRN-CNP and to follow-up with Dr. Rapacki, the neurosurgeon. Unfortunately, Mr. Buchanan did not follow-up with those healthcare providers as directed. He returned to Muskogee and to the best of my knowledge, was not evaluated by another physician until he presented to the emergency department at St. John Medical Center on October 14, 2016. The physicians in the emergency department did not perform any laboratory studies and did not perform further imaging studies on Mr. Buchanan. To my knowledge, the physicians in the emergency department did not review any of the previous imaging studies performed during Mr. Buchanan's two-week admission to the hospital. Mr. Buchanan was sent out with a prescription for Naprosyn 500 mg twice a day and Robaxin 750 mg one to two tablets, three times a day, as needed for muscle spasm.

Mr. Buchanan was advised to follow-up with the surgery team. He was instructed to contact Dallas Buck. Mr. Buchanan should call on Monday for a follow-up appointment. Mr. Buchanan was given handouts from the

Exhibit 10

emergency department and instructed to return to the emergency department if his symptoms return. (St. John Medical Center 1010-1043)

Mr. Buchanan did not follow the instructions of the emergency room physicians and did not contact Dallas Buck for a follow-up appointment and he did not return to the emergency department at St. John Medical Center.

Instead, Mr. Buchanan sought further care from Dr. Frank Greenhaw, who is a chiropractor. Dr. Greenhaw evaluated and treated Mr. Buchanan on October 21, October 24, October 26, and October 31, 2016. On presentation to Dr. Greenhaw's office, Mr. Buchanan stated that he has neck pain and upper back pain. There is nothing that makes his symptoms better. His activities of daily living and movement make his symptoms worse. He describes his pain as intense pain and constant. **He describes left arm symptoms down to the hand and that the left arm is worse. He also has right arm symptoms to the elbow.**

Mr. Buchanan was also seen for long-term chronic pain management with Dr. Kenneth Trinidad on October 27, 2016. Dr. Trinidad evaluates Mr. Buchanan and dictates a detailed note that is documented above, within the IME. Dr. Trinidad states that he will try to obtain the imaging studies from St. John Medical Center. He adds Norco to Mr. Buchanan's medication regimen and continues him on Naprosyn and Robaxin.

On October 31, 2016, Mr. Buchanan is seen for the final time by Dr. Greenhaw. So far, Dr. Greenhaw and Dr. Trinidad have not recommended further imaging studies, which given Mr. Buchanan's presentation would have been the appropriate next step. At this clinic visit with Dr. Greenhaw, Mr. Buchanan rated his **arm pain as a 10/10**, his **neck pain as a 9/10**, and his **shoulder pain as a 9/10**.

On November 3, 2016, Mr. Buchanan surrendered to be incarcerated at the Muskogee County Detention Center (MCDC). There was a bench warrant issued for Mr. Buchanan's arrest related to another issue.

On presentation to the MCDC, the booking photograph of Mr. Buchanan reveals his head and neck in a forward flexed position, slightly flexed to the left with slight rotation to the left. His head position in the booking photograph is very similar to his head and neck position seen on the videotape phone call with his brother on November 11, 2016. Mr. Buchanan had previously stated that he was developing significant left upper extremity symptoms and some right upper extremity symptoms prior to surrendering in Muskogee County. The physicians that saw him for evaluation including Dr. Trinidad and Dr. Greenhaw, both documented that Mr. Buchanan was having significant neck and upper thoracic pain. He was also having severe pain in his left upper extremity and right upper extremity down to the elbow.

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At the time of presentation to MCDC, Mr. Buchanan would already have some of the complaints that he was discussing with the detention facility staff during his incarceration. The detention facility staff, would have regarded Mr. Buchanan's posture and complaint of symptoms, as his normal state of being at that time.

Mr. Buchanan was evaluated by the medical staff on November 4, 2016 and was seen twice a day every day by one of the nurses in order to provide him with the naproxen 500 mg p.o. b.i.d. as prescribed by Dr. Cooper. The medication chart documents that Mr. Buchanan received an evening dose of Naprosyn on November 4, a morning and an evening dose on November 5, 6, 7, 8, 9, 10, 11, and 12. He also received Naprosyn 500mg, in the evening on November 13, 2016 and in the morning of November 14, 2016.

The Turn Key medical staff had a face-to-face encounter with Mr. Buchanan at least twice per day during his incarceration. They were evaluating Mr. Buchanan when they gave him his twice a day dose of Naprosyn 500 mg and they evaluated him on several other occasions. At the time that the medical staff evaluated Mr. Buchanan, it would NOT have been necessary to take and document his vital signs at each encounter. Even if they had taken vital signs for Mr. Buchanan at every encounter, those vital signs would not have provided any additional benefit, from a diagnostic standpoint.

On November 11, 2016, Mr. Buchanan had the video phone call with his brother Stan Buchanan as outlined above under the November 11, 2016 note. Mr. Buchanan was walking at that point and had use of his right upper extremity. He had assistance holding the phone on the left side by the other inmate. However, Mr. Buchanan told me during the IME that he had pain in his neck from day one of his incarceration and **Mr. Buchanan states that he was already developing upper extremity weakness and lower extremity weakness prior to the date of his incarceration.**

The detention facility officers and medical staff continued to treat Mr. Buchanan appropriately and when Mr. Buchanan developed a change in his symptoms for the worse. This occurred on November 14, 2016 when they were notified by the other inmates that Mr. Buchanan had urinated on himself. The staff evaluated Mr. Buchanan, and contacted Dr. Cooper who gave the order to discharge Mr. Buchanan to the Wagoner Hospital.

At Wagoner Hospital, a new CT scan of the cervical spine revealed severe destruction of the C5 and C6 vertebral body along with the C5-C6 interbody disc consistent with osteomyelitis that, was directly related to the infection and

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abscess in Mr. Buchanan's cervical spine that was present at least 3 to 4 weeks prior to the September 16, 2016 MVC.

Following the September 16, 2016 MVC, Mr. Buchanan was seen and evaluated in the emergency department at Eastar where he was provided with excellent medical care. He was then transferred to St. John Medical Center where he was again provided with very good medical care by approximately 20 separate healthcare providers.

However, none of the physicians or healthcare providers that treated Mr. Buchanan were able to identify or recognize that the fluid collection in the retropharyngeal or prevertebral space was an abscess from an infection that predated the MVC.

The physicians and medical staff at St. John Medical Center had the best opportunity for diagnosing this particular rare and insidious disorder that is notorious for a delay in diagnosis. While at St. John Medical Center, Mr. Buchanan showed all the hallmark clinical manifestations of a cervical spinal infection and cervical spinal epidural abscess. Those hallmark symptoms included pain in the area of the infection which occurs in approximately 90% of these patients, presentation of a fever which occurs in approximately 60% to 70% of patients, and leukocytosis, or an elevated white blood cell count that has been reported in 60% to 77% of patients. Mr. Buchanan also had bacteremia, with blood cultures positive for methicillin-sensitive Staphylococcus aureus.

The physicians at St. John Medical Center also had imaging studies that clearly show a huge fluid collection in the retropharyngeal or prevertebral space spanning the length of his cervical spine from C1 down over the anterior thoracic spine and into the mediastinum. The huge collection of fluid could not have been a hematoma due to the lack of damage or injury to the structures in Mr. Buchanan's cervical spine. Unfortunately, the fluid collection was labeled as a hematoma while Mr. Buchanan was at Eastar and that label, for the fluid collection, persisted throughout his two-week stay at St. John Medical Center.

However, with all the evidence available for the doctors at St. John Medical Center to make the appropriate diagnosis, the diagnosis was not made until Mr. Buchanan began to develop increasing neurologic symptoms while incarcerated at Muskogee County Detention Center. This is why the spine surgery literature describes "A delay in diagnosis of spinal epidural abscess is the RULE not the EXCEPTION."

Exhibit 10

The staff and the medical providers at Muskogee County Detention Center should be commended for identifying Mr. Buchanan's change in condition and quickly discharging him to the hospital for a higher level of care.

The quick action by the staff and medical providers at Muskogee County Detention Center allowed Mr. Buchanan to get the appropriate surgical intervention that is required for this particular diagnosis.

During the course of the IME and physical examination, Mr. Buchanan was noted to be very high functioning after experiencing such a potentially devastating and catastrophic diagnosis. Mr. Buchanan is highly functioning from a neurologic standpoint with only some mild residual left upper extremity weakness.

Is my expert medical opinion and within a reasonable degree of medical probability that, the MVC that Mr. Buchanan was involved in on September 16, 2016, played no role in his subsequent development of paralysis. His injuries from the MVC included broken ribs, and pneumothorax, and some bruising, scraping and small lacerations.

At the time of the MVC on September 16, 2016, Mr. Buchanan already had a well-established prevertebral abscess that was identified initially on CT scan at Eastar, but the radiologist mistakenly identified the prevertebral abscess as a prevertebral hematoma. The prevertebral fluid collection was confirmed on MRI scan at St. John Medical Center. However, once again the prevertebral abscess was mistakenly identified as a prevertebral hematoma. The radiologist who read the MRI scan was concerned that there was not significant trauma to account for a "prevertebral hematoma". The neurosurgeon at St. John Medical Center, Dr. Rapacki also documented in his recommendations that he wanted to, **"Obtain magnetic resonance imaging of the cervical and thoracic spine to screen for soft tissue injury to explain the prevertebral hematoma."** However, they never did document a bony or soft tissue injury that would explain the huge prevertebral fluid collection that was mistakenly identified as a hematoma.

The infection that Mr. Buchanan had at the time of the September 16, 2016 MVC was present at least 3 to 4 weeks prior to the MVC. Mr. Buchanan, over the two months following the MVC sustained erosion of the inferior vertebral body of C5 and superior vertebral body of C6 secondary to osteomyelitis or infection of the bone. The early signs of osteomyelitis are visible in the vertebral bodies and the superior endplate of C6 on the CT scan performed at Eastar on September 16, 2016.

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Following the MVC, Mr. Buchanan was closely watched by more than 20 different physicians and highly skilled healthcare providers at Eastar and during his two-week inpatient hospitalization at St. John Medical Center. During this period of time, Mr. Buchanan developed a significant fever, elevated white blood cell count or leukocytosis, and continued to have severe neck pain related to the cervical abscess. None of the highly trained physicians treating Mr. Buchanan during this two-week period of time were able to diagnose this incredibly rare and insidious disorder of a cervical spine infection with a huge prevertebral abscess and an epidural abscess. Mr. Buchanan was treated with seven days of IV antibiotics for the recurrent increased white blood cell count and his recurrent fevers. The administration of IV antibiotics slowed the progression of the infection, but did not cure the infection. Once Mr. Buchanan was discharged on September 30, 2016 and was no longer on IV antibiotics, the infection would have resumed its growth, spread and caused further destruction of the affected structures in his cervical spine.

The slow and insidious progression of an infection in the cervical spine, will eventually produce pressure on the cervical spinal cord or can lead to osteomyelitis (bone infection) within the vertebral bodies, and will produce enough bone destruction to cause instability of the cervical spine and spinal cord compression or impingement leading to slow and progressive neurologic changes.

Mr. Buchanan continued to receive care following the MVC from some of the best physicians in the Tulsa, Oklahoma area at Eastar and at St. John Medical Center during a two-week hospitalization. Following discharge, Mr. Buchanan was again seen in the emergency department at St. John Medical Center where the diagnosis once again eluded the highly trained physicians. Mr. Buchanan was then evaluated multiple times by his chiropractor, Dr. Frank Greenhaw and he was evaluated by Dr. Kenneth Trinidad on October 27, 2016. Dr. Greenhaw and Dr. Trinidad did not diagnose this very rare and insidious condition.

On November 3, 2016, Mr. Buchanan surrenders to Muskogee County for an outstanding bench warrant and is incarcerated at the Muskogee County Detention Center. The spinal infection that Mr. Buchanan has had for over two months is slowly and progressively causing increasing symptoms. The booking photograph of Mr. Buchanan shows that his head and neck position are in forward flexion, with left lateral flexion and slight left rotation. Mr. Buchanan's head position on his booking photograph is similar to his head position seen on the video phone call that he had with his brother on November 11, 2016. Mr. Buchanan had left arm symptoms down to the hand, and he had right arm symptoms to the elbow, prior to November 3, 2016.

Exhibit 10

The highly trained physicians in the Tulsa, Oklahoma region of our state were unable to ascertain Mr. Buchanan's diagnoses and during his two-week admission to the hospital at St. John Medical Center, the physicians completely misdiagnosed Mr. Buchanan.

It would have been virtually impossible for a family practice physician, an internal medicine physician, a registered nurse (RN) or a licensed practical nurse (LPN) to have determined the rare and insidious cervical spinal infection that Mr. Buchanan had at the time of his incarceration.

However, it was in fact the staff of the Muskogee County Detention Center and the medical staff with Turn Key that identified when Mr. Buchanan had developed a change for the worse and they obtained a recommendation and order from Dr. Cooper to transfer Mr. Buchanan to the local emergency department for evaluation and definitive treatment.

Mr. Buchanan lives alone and according to the physical therapy notes, Mr. Buchanan had limited caregiver support. If Mr. Buchanan had not been incarcerated on November 14, 2016, when his change in condition was identified and correctly acted upon. Mr. Buchanan might have been home alone and suddenly developed quadriparesis, which would have led to complete and permanent quadriplegia, and it could have led to Mr. Buchanan's death. However, since he was incarcerated at the Muskogee County Detention Center, the facility staff and Turn Key medical staff were able to identify his change in condition and send him to the emergency department that resulted in Mr. Buchanan getting the correct care for the treatment of his severe cervical infection.

It is also my expert medical opinion that, if Mr. Buchanan had been admitted to the hospital on November 3, 2016, the date of his incarceration, instead of being admitted on November 14, 2016, the surgery that was required to treat his cervical spine infection would have been the same, including the anterior vertebrectomy and debridement of the cervical spine with decompression of the cervical spinal canal, anterior spine reconstruction and fusion, followed by posterior spine reconstruction, decompression, stabilization and fusion. Mr. Buchanan would have also required the exact same type of hospital care including six weeks to three months of IV antibiotics. Mr. Buchanan's recovery following the two spine surgeries and his need for long-term rehabilitation and home healthcare would also have been the same. He would have continued to require rehabilitation and physical therapy for approximately six months in order to reach maximum medical improvement.

It is my opinion that, given the severity of the infection that Mr. Buchanan had affecting his cervical spine and the potential for a catastrophic outcome,

Exhibit 10

including complete and permanent quadriplegia or death, Mr. Buchanan has had an excellent result from surgical intervention. He has full use of all four extremities and on my clinical examination, during the IME Mr. Buchanan was noted to have very minor residual weakness in his left upper extremity. Mr. Buchanan did not appear on physical examination, to have any limitations. I believe that Mr. Buchanan has had an excellent outcome.

I declare under penalty of perjury that I have examined this report and all statements contained herein, to the best of my knowledge and belief are true, correct and complete.

I reserve the right to alter or adjust my opinion regarding Mr. Smith, if further records, testimony or evidence are produced that may affect my opinion.

s/ E. Alexander L'Heureux, Jr., MD, FACS

E. Alexander L'Heureux, Jr., MD, FACS

Exhibit 10